STATE OF NEW YORK

DEPARTMENT OF CONSERVATION

WATER POWER AND CONTROL COMMISSION

THE WATER TABLE IN LONG ISLAND, NEW YORK, IN JANUARY 1951

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DEPARTMENT OF CONSERVATION
WATER POWER AND CONTROL COMMISSION

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FOREWORD

In 1945 the report, "The water table in the western and central parts of Long Island, N. Y.", by C. E. Jacob, former hydraulic engineer of the U. S. Geological Survey, was released as Bulletin GW-12, one of the series of ground-water bulletins published by the State of New York Department of Conservation, Water Power and Control Commission. Bulletin GW-12 contained a rather complete review of the early ground-water records for Long Island, and included a water-table contour map for May 1943 together with cross sections showing profiles of the water table in 1903 and 1943.

This informative bulletin has been very much in demand since its release, and especially during and since the recent "water crisis" in New York City. Copies have been requested by state, county, city, town, and village officials in Long Island and elsewhere in New York State. Engineers, geologists, well drillers, contractors, libraries and people from all walks of life have been furnished copies of Bulletin GW-12. The supply of this publication has now been exhausted.

Recognizing that Bulletin GW-12 has been useful to a considerable number of State, Federal, and county agencies and to the general public, the New York Water Power and Control Commission and the U. S. Geological Survey undertook the preparation cooperatively of a release containing up-to-date information on the status of ground-water reserves on Long Island. As Bulletin GW-27 is essentially an up-to-date revision of Bulletin GW-12, full recognition and acknowledgment of Mr. Jacob's work is desirable.

THE WATER TABLE IN LONG ISLAND, NEW YORK, IN JANUARY 1951

By N. J. LUSCZYNSKI and A. H. JOHNSON

INTRODUCTION

Since January 1932 the Geological Survey, United States Department of the Interior, has cooperated with the New York State Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and, more recently, with the Suffolk County Water Authority, in an intensive study of the ground-water resources of Long Island. This work has been under the general direction of O. E. Meinzer, Geologist in Charge of the Ground Water Branch of the Water Resources Division of the Geological Survey, and, after his retirement in 1946, under that of his successor, A. N. Sayre, and under the immediate supervision of M. L. Brashears, Jr., District Geologist in charge of ground-water investigations in New York and New England.

The continuing program has included the systematic measurement of water levels in shallow observation wells on the island. The purpose of these measurements has been in part to map the water table and to evaluate its fluctuations, whether natural ones resulting from variations in rates of precipitation, evaporation, and transpiration, or artificial ones resulting from pumping for municipal, industrial, agricultural, or other useful purposes. The contour map of the water table presented in this report represents in a sense the culmination of an effort to expand a growing network of observation wells to cover most of Long Island. In another sense, however, it will merely serve as a guide, along with earlier contour maps, pointing to a more complete and accurate map that may be drawn after adequate coverage of the entire island, and particularly of the critical area in Brooklyn and western Queens, by means of installing shallow test wells.

The present bulletin represents a cooperative endeavor of many persons in several organizations. Water-level measurements for this contour map for Long Island was made possible by the continuing financial cooperation of the New York State Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and the Suffolk County Water Authority. In addition, W. Fred Welsch, Senior Engineer of the Nassau County Department of Public Works, made available members of his staff who assisted the U. S. Geological Survey in making a special complete round of measurements in all observation wells in Nassau County during December 1950 and early January 1951. He also furnished the Geological Survey with well-location maps, pertinent previous water-level records, and many other data which proved helpful in the contouring of the water table in Nassau County. Henry L. Frauenthal, also of the Nassau County Department of Public Works, offered many helpful suggestions.

The detailed data for the tables were assembled and tabulated by the members of the Mineola office of the Ground Water Branch, U. S. Geological Survey. The water-table contour map and cross sections showing profiles of the water table at several locations were prepared by the New York State Water Power and Control Commission in cooperation and consultation with the U. S. Geological Survey. All drafting was done by members of the Jamaica office of the Water Power and Control Commission.

Grateful acknowledgments are due Russell Suter and John C. Thompson, former and present Executive Engineers of the New York State Water Power and Control Commission, respectively, whose constructive criticism led to notable improvements in the map.

GEOLOGY

The geology of Long Island will be sketched only briefly here, as it has been discussed at length by several writers (1) (2) (3) (4) (5) (6) (7).[1]

Long Island is formed of glacial deposits of varying thickness that were laid down on unconsolidated beds of Cretaceous age. The backbone of the island is a double row of hills representing terminal moraines fashioned by the great ice sheets of the Pleistocene epoch. South of these morainal deposits is an outwash plain that slopes gently toward the ocean. The outwash material is quite permeable and rather uniform in structure. The water table in the area south of the moraines is accordingly a more or less continuous surface of low slope, though modified somewhat by the streams that are fed by the ground water.

[1]See references at end of report.

Along the north shore of the island the glacial deposits are much less homogeneous and generally less permeable, being composed in part of boulder clay. Numerous bays are cut into the shore of the island along the Sound. Flowing into these bays are many small streams of steep slope, some of which are fed by natural springs. In the area north of the moraines there are several small lakes and water tables perched on impermeable lenses of clay above the main water table. There the main water table slopes steeply and in irregular fashion, generally toward the north shore.

The Upper Cretaceous beds that underlie the glacial deposits on most of Long Island and crop out in some places are also of importance because of their influence on the configuration of the main water table. The uppermost beds of that series, which supposedly belong to the Magothy formation, comprise interbedded sands and silts totaling several hundred feet in thickness. Underlying these sands and silts are clays assigned to the Raritan formation, which are underlain by the Lloyd sand member of the Raritan formation. The Lloyd sand member, an excellent water-bearing bed, rests unconformably on the ancient crystalline rocks and dips toward the southeast about 100 feet to the mile. The sands of the Magothy (?) formation, as well as the Lloyd sand member, all have the main unconfined ground-water body on Long Island as the source of their head. The movement of water through these sands unquestionably affects the shape of the main water table.

In many areas on the island it is difficult to determine where the main water-table aquifer leaves off and the Cretaceous deposits begin.

EARLY GROUND-WATER RECORDS

In 1851 water-level measurements were made in about 30 shallow wells in the southern parts of Kings and Queens Counties. These were reported by McAlpine (8) in 1852. However, neither the exact locations of the wells nor the dates of measurements are given.

The earliest known contour map of the water table for any part of Long Island appeared in 1867 in a report by Kirkwood (9). It covered the area lying between Jamaica and Hempstead and extending about 8 miles inland from the south shore. The measurements upon which this map was based presumably were made in the late fall of 1859 or the early spring of 1860 (10). In 1854 Stoddard (11) reported altitudes of the water table at several wells in Brooklyn in connection with a study of possibilities of water supply from underground sources in that area.

MAP OF 1903 BY BURR-HERING-FREEMAN COMMISSION

In November 1903 the Commission on Additional Water Supply for the City of New York reported its findings to the Commissioner of Water Supply, Gas and Electricity (12). This Commission came to be known as the Burr-Hering-Freeman Commission, for those were the names of its members. Their report included a contour map (pl. 8 of appendix 7, following p. 810) of the water table as of July 1, 1903, based on water-level measurements in 1,378 shallow wells, 333 of which were 2-inch test wells driven especially for that purpose. The map covers that part of Long Island lying west of Manor and Moriches, Suffolk County, except that area within the Borough of Brooklyn of the City of New York. The contour interval is 5 feet. The map shows a water table conforming to the general outline of the island and modified by the numerous bays and streams. The maximum slopes of the water table on the south shore, as measured on 10 north-south sections across the island (12, pl. 7 of appendix 7, following p. 810), ranged from 7 to 20 feet per mile and averaged about 14 feet per mile. Slopes on the north shore were reported as ranging from 30 to 100 feet per mile, though they were not so well defined because of the variable composition and structure of the morainal material there in contrast to the more nearly uniform deposits that underlie the outwash plains to the south.

The datum of the Brooklyn Water Department was used in the Burr-Hering-Freeman investigation. It was found to be 1.087 feet above the Willets Point datum, the latter having been fixed by tide observations at Willets Point from 1891 to 1895.

The highest water-table elevation, slightly more than 100 feet above sea level, was shown near the Nassau-Suffolk county line between Hicksville and Huntington. However, the contours there were drawn as a succession of short dashes indicating that some uncertainty was attached to their value or meaning in that area. On page 811 of the Burr-Hering-Freeman report the following statement is made:

> "Where these contours are shown as a succession of long dashes, the surface of the ground water is well established; where shown as dotted lines, as on some of the areas covered by the moraine and the thick layers of till on the northerly portion of the island, the location

of the surface of the water table is somewhat conjectural, because few existing wells were found there of sufficient depth to reach the true water table and the cost of the necessary wells, some of which would have had to be fully 150 feet in depth, was prohibitive. The surface of the ground water, which is held by the fine compact material forming the moraines and the layers of till that partially cover the northerly portion of the island, are not shown on this 1903 contour map, since, in general, it appears that the water from these elevated strata is slowly percolating into the sands and gravels that, as the geologists have shown, underlie the mantle of till, to what might be termed the lower water table, which is the surface shown by the contours. . . . The strata between these two saturated layers are, in some localities, completely saturated, the difference between the elevations of the two water tables representing the loss of head through vertical seepage; but in many localities the intervening sands were found to be only partially saturated."

In recent years wells of the requisite depth have been drilled in some of the doubtful areas shown on the 1903 map. The results are given on the contour maps accompanying this report. Some of these wells struck water at two levels before the main water table was reached, confirming the observation made in 1903.

The 1903 water-table map of the Burr-Hering-Freeman Commission was republished with slight modifications by the Geological Survey in 1906 in a report on the ground-water resources of Long Island (1). The location of contours in doubtful areas was again shown, by means of dotted lines.

The western part of the 1903 water-table map, covering Queens and Nassau Counties only, was reproduced in 1912 by the Board of Water Supply of the City of New York in its report on obtaining an additional supply of water for the City of New York from Suffolk County (13).

An extension of the 1903 water-table contours into Brooklyn was made by Wiggin in 1934 in an engineering report on behalf of the New York Water Service Corporation, objectors to the application of the City of New York to the Water Power and Control Commission for additional ground-water supply in Brooklyn, Queens, and Nassau (14). Those contours, which had been terminated at the Brooklyn-Queens boundary, were extended into Brooklyn on the basis of water levels reported by Stoddard (11) in 1854, trunk-sewer invert elevations, and water levels from records of test borings for subway construction. The highest elevation of the water table shown in Brooklyn for 1903 was about 20 feet. Wiggin remarked, ". . . it is probable that a few isolated areas in the high parts of Prospect Park and elsewhere had higher levels. . . ." The Burr-Hering-Freeman contours of 1903 were again published in 1937, by the Water Power and Control Commission (15), together with Wiggin's extension of those contours into Brooklyn (14). Comparison was made with water-table contours for 1936.

MAP OF 1908 BY BOARD OF WATER SUPPLY, CITY OF NEW YORK

The report of the Board of Water Supply (13) referred to previously is appropriately called the Spear report after Walter E. Spear, at that time Division Engineer of the Board of Water Supply. Under his direction an intensive investigation was made of the ground-water resources of western Suffolk County. The study of ground-water levels was extended eastward to the longitude of Riverhead.

The Spear report contained a map (vol. 1, sheet 6, opposite p. 108) showing the configuration of the water table on July 1, 1907, in that part of Suffolk County lying west of Riverhead, in addition to the above-mentioned water-table map of Queens and Nassau for 1903 (vol. 1, sheet 1, opposite p. 60) republished from the Burr-Hering-Freeman report. The contour interval was 5 feet. All elevations were referred to a new datum 1.72 feet below the datum of the Brooklyn Water Department.

General agreement was shown between the Spear map of 1907 of western Suffolk County and the Burr-Hering-Freeman map of 1903 covering the same area. Many of the wells put down during the 1903 investigation were later measured by the Board of Water Supply. In addition, about 300 two-inch test wells were driven in the area to augment those wells and other existing wells available for observation.

Caution in the interpretation of the water-table contours in certain areas was again urged in the Spear report, as the following quotations from pages 108 and 109 will show:

"The ground-water contours shown here define, however, only the main surface of saturation. In the moraines, local beds of clay and boulder till maintain elevated water tables that are much higher and quite independent of the main surface of saturation. Between

these elevated or "perched" water tables . . . and the main water table below, the strata are only partially saturated. . . .

"There are but few observations upon the surface of the main water table beneath the high and compact morainal ridges, and the ground-water contours there are drawn in a general way from the observations in wells outside of these areas. This lack of information in these areas does not appreciably affect the accuracy of the determination of the ground-water catchment. The few wells in the *doubtful area* between the Nassau County line and Elwood indicate that the ground-water summit is not far from the surface divide of the southerly moraine."

MAP OF 1933 BY WIGGIN

A contour map of the water table in Brooklyn and Queens in May 1933 was presented by Wiggin (14) in connection with hearings before the Water Power and Control Commission on the application by the City of New York already referred to. This was a joint effort by consulting engineers for the objecting water-supply companies and officials of the New York Department of Water Supply, Gas and Electricity. By comparing this map with the contours of 1903 and their extension into Brooklyn, Wiggin estimated the amount of water that had been withdrawn from storage in that critical area during the intervening 30 years. Wiggin's map of 1933 was published by Laase (16) in 1934 and by Thompson, Wells, and Blank (2) in 1937.

MAP OF 1936 BY NEW YORK STATE WATER POWER AND CONTROL COMMISSION

In Bulletin GW-2 of this series (15), published by the Water Power and Control Commission in 1937, Suter gave a water-table map for 1936 with a 5-foot contour interval, covering again the area from Riverhead westward. To obtain the data numerous wells were measured, some of them after relatively short periods of recovery. In many cases it was necessary to estimate altitudes of land surface, at wells for which water-level readings were available, from topographic maps (15, p. 51), but despite this lack of refinement the 1936 contour map was of value in indicating important changes, even in the short period from 1933 to 1936, particularly in the critical area of Brooklyn.

In commenting on the amount of knowledge at the time of the hearings on the application of the City of New York in 1933, Suter stated (15, pp. 48, 50) "All along the Queens-Nassau County line this Brooklyn overdraft had lowered the ground-water level by many feet. How far into Nassau County that effect went and whether it extended to Suffolk was not then (1933) known." One object of the studies made in 1936 was to fill in this gap, but again perched water-table conditions presented a serious handicap. With the funds available and with the time allotted it was not then possible to drill the necessary deep test holes to determine the true position of the main water table in the center of the island. Suter repeated the warnings given in both the Burr-Hering-Freeman and the Spear reports, in the following words: "There is ever present danger that in hills, along the moraines and in disturbed strata generally levels may be taken in wells piercing perched water deposits and so fail to indicate the true upper surface of the main body of ground water." (15, p. 51). This reservation tempered his summation (p. 50) of the results of the investigation just then completed: "Latest information showed material changes for the worse in the period 1933-1936. . . . Not only has the Brooklyn depression gone down—as was expected—but the depressed area has extended far to the east into Queens County. The effects in Nassau County are serious and there can be no doubt that they extend even into Suffolk, although somewhat *masked by the difficulty of avoiding perched water tables* in the ranges of hills near the county line."

Deep observation wells drilled more recently in that area passed through the perched water bodies and reached the main water table. As discussed more fully below, it now appears that the effect of pumping in Brooklyn has not extended to Suffolk county. The apparent decline of the water table at the Nassau-Suffolk County line is attributable, first, to the fact that the early maps contoured perched water tables, and second, to differences in the amount of precipitation that preceded the measurements on which successive maps were based.

MAP OF 1943 BY GEOLOGICAL SURVEY

In Bulletin GW-12 of this series (17), published by the Water Power and Control Commission in 1945, Jacob prepared a water-table map for May 1943 with 10-foot contour interval covering Long Island from Brooklyn eastward to central Suffolk County, to the longitude at Yaphank. The contours were based on water-level measurements in 289 shallow wells (28 in Kings, 25 in

Queens, 175 in Nassau, and 61 in Suffolk Counties). Water levels in supply wells of the New York Water Service Corporation in Flatbush, Brooklyn, were taken from the testimony of T. H. Wiggin, Consulting Engineer, given at hearings before the Water Power and Control Commission; in some cases these were the static levels of wells in service.

The 1908 map by the Board of Water Supply (13, vol. 1, sheet 6, opposite p. 108) was used by Jacob as a guide in drawing contours in Suffolk County. In addition to the datum adjustment, allowance was also made for the general decline of water levels that was known to have occurred since that time (18).

Perhaps the most striking difference between the 1943 water-table contour map and earlier water-table contour maps of Long Island is the configuration of the high in Nassau County. The maximum elevation of the main water table in Nassau County in May 1943 was about 85 feet, or approximately 15 feet lower than that shown on the 1903 contour map. Furthermore, the high point in 1943 was about 5 miles west of its position on the 1903 map. However, it must be kept in mind that on the 1903 map the contours in that area were drawn as dashed lines, indicating that the position of the true water table was conjectural, as pointed out above (p. 3).

The difference in average elevation of the water table in 1903 and 1943 is attributable partly to differences in precipitation. A recent study (18) of early water levels and precipitation and their long-term correlation shows that in 1890, or about that year, the water table was at its highest stage since 1850. A secondary high was reached in 1903. On the basis of precipitation data it is estimated that in Nassau and western Suffolk Counties the water table should have averaged about 4 or 5 feet lower in 1943 than in 1903. The profiles show approximately that much difference in the stage of the water table at the beginning and end of this 40-year period.

Another significant difference between the 1943 contour map and earlier maps is in the shape and extent of the water-table depression in Brooklyn and western Queens. The probable original shape of the water table in Brooklyn is indicated in section A-A′ on plate 4 (also 17 pl. 2), which is based on Wiggin's extension of the 1903 contours (14). The water table was above sea level and as high as 30 feet above near the Queens County line. The decline that has occurred there is the result of pumping for industrial purposes and for public water supplies (19). In the early years of the ground-water development in Brooklyn the decline was gradual. In later years it was accelerated and the water-table depression expanded. A comparison of the 1933 and 1936 contour maps shows that the water table in parts of Brooklyn and Queens declined rather sharply during that 3-year period. Since 1936 there has been only a small net decline, although the depression has continued to expand. In general, the lowest water levels were reached about 1941. From 1941 to 1943 a slight recovery of water levels in the area of most concentrated pumping was recorded.

In Queens County the water table in 1943 was lower everywhere than it was in 1903. Part of that difference in levels is due to the difference in average rates of precipitation before 1903 and before 1943, which was discussed above. However, the major part of the difference in water levels there was due to the increased pumping in the area adjacent to section B-B′ on plate 1 (also 17 pl. 1).

Jacob emphasized . . . "in view of the relative nearness of the center of heavy pumping in Brooklyn to the East River, it is not likely that the effect of that pumping reaches very far into Queens. As the water table hinges on the tidewater in the nearby channels, any transient state of flow set up by a change in the rate of pumping in that area soon degenerates into a new steady state of flow without affecting appreciably the water levels at comparably greater distances in the opposite direction."

MAP OF 1951 BY WATER POWER AND CONTROL COMMISSION AND GEOLOGICAL SURVEY

Plates 1-3 constitute a map of Long Island in three sections which shows by contours the configuration of the main water table during December 1950 and early January 1951. Water-level data for the North Fluke and the South Fluke in Suffolk County are presented for the first time; previously the position of the water table was ascertained only as far eastward in Long Island as the longitude of Riverhead.

The contours are drawn with a 10-foot interval in most localities of Long Island on the basis of water-level measurements in 533 wells (45 in Kings, 46 in Queens, 245 in Nassau, and 197 in Suffolk Counties) listed in the table. This number represents an increase in the number of wells in all four counties of Long Island since the preparation of Bulletin GW-12. Since then a large number of observation wells in the Brookhaven area and in the North Fluke and South Fluke of

Suffolk County were added to the continuing program in Long Island. However, in spite of the large increase, areas in need of at least a few wells for better definition of contours can still be found in each of the four counties on Long Island.

Nearly all the wells listed in the table are screened in the upper Pleistocene (glacial) deposits and reflect water-table conditions. It was found necessary to use a few wells screened in the underlying sands of the Magothy (?) formation for the contouring of areas where shallower observation wells are not available. It is believed that the water levels in the selected deeper wells represent the approximate position of the main water table. The table beginning on page 11 gives pertinent data concerning these wells. The State well numbers are those adopted by the New York State Water Power and Control Commission (20-24) and widely used by other agencies. The same numbers are used in the series of water-supply papers of the Geological Survey (25) in which complete water-level records for most of the wells are published, most of them going back to the beginning of record. The owner's number is given in many cases to assist in referring to the early records.

Under "Location" are generally given the addresses or nearest street intersections, though in many cases merely the localities are given. The depth of the well means the total depth from the measuring point, which is a convenient reference mark, such as top of coupling, casing, well pit, or other point. The measuring point is generally within a foot of the ground surface, except as noted under "Remarks."

All altitudes given in the table refer to the mean-sea-level datum at Sandy Hook, N. J. The altitudes of measuring points were determined by differential leveling by the Geological Survey, the Nassau County Department of Public Works, the New York City Board of Water Supply, and others. The tabulated water levels represent for the most part measurements made during December 1950 and early January 1951. For discontinued, abandoned, and a few other wells, at which recent data were not obtained, the latest available measurement is listed. Water levels measured at a time other than December 1950 or January 1951 were adjusted for water-level trend and then rounded off to the nearest foot when the water table was contoured.

For the sake of completeness, all shallow observation wells at which water-level measurements were made were listed in the table. And, although actually the water levels for all the wells were used in the determination of the contours for the water table, a few wells were excluded from the final drafts of plates 1-3 to avoid overcrowding. These are referenced to nearby wells under "Remarks" in the table. Well locations, numbers, and water levels are all shown on plates 2 and 3. However, it was deemed advisable to leave out the water-level data in plate 1 because of the large number of wells and their concentration in many localities. However, all water-level measurements are listed in the table.

Several of the previous maps were used as guides in the contouring of the water table for January 1951. In Suffolk County, the 1908 map (13) by the Board of Water Supply and a more recent 1946 map (26) by the Geological Survey were particularly valuable.

Where the density of wells is adequate, the contours are drawn as full lines. Where there is some uncertainty as to its interpretation, the contours are drawn as broken lines. In the northwestern part and in the South Fluke of Suffolk County, as well as in areas north and south of the Peconic River, there are only a few, or at least an insufficient number of, observation wells. The provisional dashed contours in these localities and elsewhere on Long Island should be regarded only as suggestive of the general shape of the main water table.

Because of the insufficient number of wells, no contours were shown for that area in Queens lying north of the terminal moraine. The zero contour encircles the center of heavy pumpage in the Woodhaven area and separates the high area of north Queens from the low area of Brooklyn. At two "stagnation" points it intersects the closed zero contour that completely encircles the island along its shore. One of these points is on Jamaica Bay and the other assumedly on Newton Creek. A similar zero contour separates the relatively higher area of the southern half from the northern half of Brooklyn.

No attempt has been made to draw in the contours below the 60-foot contour in the till and moraine areas of northern Nassau County because many of the wells in that area undoubtedly reach only the perched water tables. That is true, for example, of wells N 1171, N 1172, and others. Contours were also left out along the northern edge of Suffolk County where no water-level data are available because of the complete lack of observation wells, and also in the North Fluke where the water table is less than 5 feet above mean sea level.

In addition to the table of data on the observation wells and the contour map (pls. 1-3), profiles of the water table for 1903 and 1951 along nine sections in western and central Long Island are plotted on plate 4.

Undoubtedly in the 1951 contour map the salient feature that contrasts most conspicuously with the 1933 and 1943 maps is depicted in Kings County (Brooklyn). Water levels recovered very rapidly in the 3½-year period following the complete cessation in June 1947 of pumping by the New York Water Service Corp. in the Flatbush area of Brooklyn. Because the shut-down reduced by more than half the total pumpage in Brooklyn, a more favorable relation between replenishment of and withdrawals from the aquifers was occasioned (27). As a result, by the end of 1950 ground-water levels in more than half of Kings County (the southern half) rose to altitudes above sea level. In the northern half the water table also recovered several feet by the end of 1950 because of the shut-down but it was still more than 25 feet below sea level at the bottom of the cone of ground-water depression. The recovery ranged from 1 foot inside the perimeter of Kings County to more than 15 feet in the former franchise area of the New York Water Service Corp.

However, in spite of the large recovery, the levels in January 1951 along the profile line A-A′ (pl. 4) and nearby localities are still many feet below those determined by Wiggin (14) for 1903. In the earlier year, the water table was determined to be above sea level everywhere in Kings County, and as high as 20 feet near the Queens County line.

The recovery of water levels was confined mainly to Kings County; the cone of recovery extended very little into Queens County. Immediately across the Kings-Queens line, in Woodhaven in southwestern Queens, very little rise of water levels was noted. The water table was a few feet below sea level in December 1950, at stages to which it had slowly receded before 1943 and where it thus has remained for many years. Along the east-west profile line B-B′ (pl. 4) and practically everywhere else in southern Queens, the January 1951 levels were about 3 feet below those of May 1943. Most of the change is attributable to the deficiency in precipitation since May 1949. Part of the decline, perhaps nearly 1 foot, is the continuation of a gradual lowering of water levels in southern Queens. Here the net withdrawal by pumpage is slightly in excess of replenishment by precipitation and by recharging wells and pits.

In Nassau and western and central Suffolk Counties, a net drop of about 2 feet, on an average, was noted since 1943. This is definitely a precipitation and not a pumping effect (18). Levels in these counties receded to stages slightly below normal, primarily because of the 10-inch deficiency in precipitation during the 19-month period preceding January 1951. The position of the water table in Nassau and Suffolk Counties is influenced principally by the precipitation pattern, as withdrawals by pumping for all uses total but a fraction of the average replenishment by precipitation. Therefore, pumping plays a relatively minor role in the over-all trend of ground-water levels.

The eastward expansion in Suffolk County of the ground-water investigations made cooperatively by the Geological Survey with the Suffolk County Board of Supervisors and the Suffolk County Water Authority was expressed by the addition to the program of 55 observation wells in the Riverhead area in 1945 and 1946, in the North Fluke between 1948 and 1950, and most recently in the South Fluke in the summer of 1950. Besides these wells, more than 50 wells were also added in the former Camp Upton area since 1947, in cooperation with the Brookhaven National Laboratory.

Water levels for December 1950 in the North Fluke (pl. 3) indicate that the water table slopes downward from an altitude of about 10 feet above mean sea level in Riverhead to less than 1 foot at Orient Point at the eastern tip. Because of the low water table, not even a 5-foot contour could be drawn east of Riverhead in the North Fluke. However, a detailed 1-foot water-level contour map now in preparation for a thesis (28), reveals that the water table in the Mattituck area fluctuates about a stage not higher, in general, than 4 feet above mean sea level. Farther east, in the Southold, Greenport, and Orient localities, the water table is contoured at levels about 2 feet, and less, above mean sea level.

In the South Fluke, levels higher than 15 feet above mean sea level were recorded north of Bridgehampton. An approximate position of the water table based on measurements made in 14 observation wells is shown by dashed contour lines. However, additional wells and more detailed definition of the geology of the terminal moraine and outwash that comprise the South Fluke will be required before more accurate contours can be established.

Plates 1-4 show that the ground-water levels in Long Island are above sea level everywhere except in northern Kings and southeastern Queens Counties. The maximum elevation of the main

water table in January 1951 was as high as 86 feet above mean sea level in Nassau County (pl. 1), and incidentally at about the same position geographically where it was reported in May 1943. The minimum level was noted in the bottom of the cone of the ground-water depression in the highly industrialized northwestern section of Kings County, where the water table has been below sea level for many years.

In Kings County since June 1947 there has been a favorable balance between replenishment by precipitation and withdrawal by pumping. Ground-water conditions have improved greatly since the shut-down of pumping by the New York Water Service Corp. However, because the water table still is below sea level in northern Brooklyn, no additional withdrawals of any consequence would be safe. Also, in Queens the trend of water levels shows overdevelopment. However, the ground-water resources of Long Island as a whole are still not fully utilized, as is indicated by the 1951 as well as the previous water-table contour maps and by Suter (15, p. 32). Through proper and coordinated development, the ground-water resources of Long Island may be used for municipal, industrial, and agricultural purposes on a much larger scale than at present.

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Table of data on shallow observation wells in Long Island, N. Y.

M. P. — Measuring Point
L. S. — Land Surface

C. W. S. C. — Citizens Water Supply Co.
H. W. D. — Hicksville Water District
L. I. R. R. — Long Island Railroad
N. C. D. P. W. — Nassau County Department of Public Works
N. Y. C. B. W. S. — City of New York, Board of Water Supply

N. Y. C. D. W. S. — City of New York, Department of Water Supply, Gas and Electricity
N. Y. S. D. H. — New York State Division of Highways
N. Y. W. S. C. — New York Water Service Corporation
U. S. G. S. — U. S. Geological Survey
Y. M. C. A. — Young Men's Christian Association

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
K30	....	C-2	Park and Nostrand Aves., Brooklyn	Detecto Scale Co.	8	50	12.85	−19.2	Dec. 31, 1950	Recorder well in basement; M. P. about 6 ft. below street.
K65	2	C-2	125 Middleton St., Brooklyn	A. Ludwig Co.	6	59.1	12.84	−19.0	Dec. 20, 1950	Well in pit.
K67	....	C-2	179 Marcy Ave., Brooklyn	Y. M. C. A.	c 1¼	30.7	31.00	−15.3	do.	Well in pit in basement; M. P. about 16 ft. below street.
K92	....	C-2	75 Lewis Ave., Brooklyn	St. John's University	6	98.6	64.45	−13.4	do.	Well in pit in basement; M. P. about 5 ft. below street.
K97	....	C-2	32 Lexington Ave., Brooklyn	The Borden Co.	8	120	62.23	−14.9	do.	Well in building; M. P. about 2 ft. below street.
K196	1	B-2	12th Ave. and 37th St., Brooklyn	Formerly Knickerbocker Ice Co.	c 1¼	137.8	80.55	3.9	Dec. 18, 1950	Well in building; M. P. about 7 ft. above street.
K236	....	C-2	Bushwick Ave. and Forrest St., Brooklyn	Chwatt Bros.	8	107	46.32	−28.5	Dec. 20, 1950	Well in building; M. P. about 2 ft. below street.
K300	....	B-2	Avenue D and Albany Ave., Brooklyn	Avenue D Theatre	6	71	23.47	2.5	Dec. 11, 1950	Well in basement; M. P. about 8 ft. below street.
K326	....	C-2	750 Flushing Ave., Brooklyn	Alba Theatre	30	108	27.08	−25.8	Dec. 12, 1950	Well in pit; M. P. about 3 ft. below street.
K337	....	B-2	Avenue M and 17th St., Brooklyn	Elm Theatre	36	29	27.00	3.4	Dec. 11, 1950	
K501	F1	B-2	363 Dahill Rd., Brooklyn	Formerly N. Y. W. S. C.	c 1¼	102.5	44.30	3.1	Dec. 18, 1950	Well in pump house.
K503	F3	B-2	401-03 McDonald Ave., Brooklyn	do.	c 1¼	137	62.42	3.0	do.	Well in garage.
K504	F4	B-2	Foster and Albany Aves., Brooklyn	do.	24	108.5	19.74	2.0	do.	Well in pump house; M. P. about 5 ft. below street.
K506	F6	B-2	723-25 Utica Ave., Brooklyn	do.	c 1¼	95.2	29.26	−2.4	do.	Well in pump house; M. P. about 2 ft. below street.
K507	F7	B-2	543-45 Troy Ave., Brooklyn	do.	c 1¼	91.8	29.72	−2.4	do.	Well in pump house.
K508	F8	B-2	807 Caton Ave., Brooklyn	do.	24	120	47.23	2.4	do.	Well in garage; M. P. about 3 ft. below street.
K530	F30	B-2	912 Cortelyou Rd., Brooklyn	do.	c 1¼	145	32.89	3.1	do.	Well in pump house; M. P. about 5 ft. below street.
K539	....	C-3	Atlantic Ave. and Logan St., Brooklyn	N. Y. C. D. W. S.	4½	32.7	22.62	−0.9	do.	Well in basement; M. P. about 10 ft. below street.
K631	....	B-2	6817 Bay Parkway, Brooklyn	Marboro Theatre	10	40	31.08	3.6	Dec. 11, 1950	
K636	....	B-1	7010 13th Ave., Brooklyn	Endicott Theatre	10	98	52.72	4.0	do.	Well in pit; M. P. about 3 ft. below street.
K889	....	C-2	199 Bogart St., Brooklyn	Finest Steam Laundry	8	72	20.81	−24.0	Dec. 20, 1950	Well in garage.
K949	....	B-1	68-17 5th Ave., Brooklyn	Alpine Theatre	12	145	76.73	3.1	Dec. 12, 1950	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
K1091	....	C-1	Clinton and Mill Sts., Brooklyn	Clinton Theatre	12	116	10.90	−4.4	Dec. 12, 1950	Well in pit; M. P. about 3 ft. below street.
K1141	....	B-3	Avenue D and E. 88th St., Brooklyn	N. Y. C. D. W. S.	1¼	61	19.03	1.4	Dec. 18, 1950	
K1194	....	C-3	Atlantic Ave. and Nichols St., Brooklyn	do.	1½	48.1	31.63	−1.7	do.	
K1198	....	C-3	Cleveland and Fulton Sts., Brooklyn	do.	1½	53.4	36.90	−1.3	do.	
K1199	....	C-2	Jefferson and Howard Aves., Brooklyn	do.	1½	75.6	48.62	−6.1	Dec. 20, 1950	
K1235	....	C-3	Fulton and Pennsylvania Aves., Brooklyn	do.	1½	79.4	60.47	−2.2	Dec. 18, 1950	
K1236	....	C-2	Patchen and Lexington Aves., Brooklyn	do.	1½	81.7	50.91	−8.6	Dec. 20, 1950	
K1237	....	C-2	Delmonico Pl. and Hopkins St., Brooklyn	do.	1½	63.2	18.02	−26.4	do.	
K1263	....	B-2	E. 16th St. and Cortelyou Rd., Brooklyn	do.	1½	49.7	35.87	2.1	Dec. 18, 1950	
K1264	....	B-2	E. 57th St. and Snyder Ave., Brooklyn	do.	1¼	66.6	43.89	0.3	do.	
K1266	....	B-3	Vermont and Livonia Sts., Brooklyn	do.	1¼	41.4	27.68	0.2	do.	
K1296	....	C-3	Blake Ave. and Crystal St., Brooklyn	do.	2	33.9	8.50	1.0	do.	
K1297	....	B-2	Flatbush Ave. and King's Highway, Brooklyn	Marine Theatre	30	72	16.34	3.5	Dec. 11, 1950	M. P. about 2 ft. above street.
K1338	F37	B-2	1015-17 Franklin Ave., Brooklyn	Formerly N. Y. W. S. C.	◦ 1¼	190	81.15	−2.1	Oct. 30, 1950	
K1347	....	C-2	DeKalb Ave. and Fulton St., Brooklyn	Albee Theatre	◦ 6	57.8	26.27	−17.1	Dec. 20, 1950	Well in basement; M. P. about 14 ft. below street.
K1359	F40	B-2	145-47 E. 57th St., Brooklyn	Formerly N. Y. W. S. C.	◦ 1¼	205	26.65	−0.2	Dec. 18, 1950	Well in pump house; M. P. about 3 ft. below street.
K1365	....	C-2	124 Atlantic Ave., Brooklyn	Atlantic and Pacific Mfg. Co.	8	103	42.89	−11.3	Dec. 12, 1950	Well in alley; M. P. about 4 ft. below street.
K1494	....	B-1	5205 4th Ave., Brooklyn	Coliseum Theatre	8	157.7	75.41	2.2	do.	
K1495	....	B-2	Avenue S and E. 16th St., Brooklyn	N. Y. C. D. W. S.	2	28.3	18.30	3.2	Nov. 27, 1950	
K1510	F48	C-2	1234-40 East New York Ave., Brooklyn	Rubin Bros.	◦ 1¼	205	51.28	−3.0	Dec. 18, 1950	Well in pit; M. P. about 4 ft. below street.
K1516	F49	B-2	311 Empire Blvd., Brooklyn	Formerly N. Y. W. S. C.	◦ 1¼	225	71.21	−2.5	do.	Well in pit; M. P. about 4 ft. below street.
K1576	....	C-2	Knickerbocker Ave. and Starr St., Brooklyn	Starr Theatre	1¼	68	36.16	−17.7	Dec. 12, 1950	M. P. about 2 ft. above street.
K1593	....	B-2	1469 Utica Ave., Brooklyn	Serota Bros.	6	106	17.53	2.2	Dec. 18, 1950	M. P. about 6 ft. above street.
N53	....	B-6	Morris and Maple Aves., Rockville Centre	Village of Rockville Centre	8	46.3	21.11	12.4	Dec. 20, 1950	Well in basement; M. P. about 5 ft. below L. S.
N1101	D1	D-5	Valley Rd. near Willets Rd., Manhasset	N. C. D. P. W.	1¼	36.6	49.88	44.3	Dec. 28, 1950	
N1102	D2	D-5	Willets Rd. near Valley Rd., Lake Success	do.	2½	140.0	185.82	55.8	Dec. 19, 1950	
N1103	D3	D-5	Marcus Ave. near Lakeville Rd., Lake Success	do.	2	120.8	145.57	57.7	do.	
N1104	D4	C-5	80th Ave. near Rhodes St., New Hyde Park	do.	2	76.6	125.37	57.4	Dec. 20, 1950	
N1105	D5	C-5	Emerson and Whittier Aves., New Hyde Park	do.	2	61.4	108.20	53.6	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1106	D6	C-5	Magnolia and Plainfield Aves., Floral Park	N. C. D. P. W.	1¼	52.5	90.91	49.3	Dec. 28, 1950	
N1107	D7	C-5	Kingston Ave. and Bertha St., S. Floral Park	do.	1¼	37.2	66.41	42.0	Dec. 20, 1950	
N1108	D8	C-5	Jacob St. and Rosalind Ave., Elmont	do.	1¼	47.1	69.87	37.1	do.	
N1109	D9	C-5	Dutch Broadway and Henry St., Elmont	do.	1¼	37.5	42.34	25.0	do.	
N1110	D10	C-5	Henry St., N. Valley Stream	do.	1¼	27.3	30.85	19.4	do.	
N1111	D11	C-5	Fletcher and Teneyck Aves., Valley Stream	do.	1¼	27.3	20.44	12.8	do.	
N1112	D12	B-5	Sunrise Highway and 2nd St., Valley Stream	N. C, D. P. W.	1¼	22.2	13.44	9.1	Dec. 20, 1950	
N1113	D13	B-5	DuBois Ave. and Drew St., Gibson	do.	1¼	22.2	10.46	5.6	do.	
N1114	D14	B-5	W. Broadway and Hamilton Ave., Hewlett	do.	1¼	31.4	24.00	9.3	Dec. 28, 1950	
N1115	D15	B-5	Wood St. and Brower Ave., Woodmere	do.	1¼	19.7	22.88	9.9	do.	
N1116	D16	B-5	Meadow Dr. and Channel Rd., Woodsburgh	do.	1¼	17.2	6.24	4.1	do.	
N1117	E1	E-5	On Fraser property, Sands Point	do.	1¼	38.3	18.31	4.5	Dec. 19, 1950	
N1118	E2	E-5	Harbor Acres, Port Washington	do.	2½	131.2	152.06	84.3	do.	
N1119	E3	D-5	Port Washington	do.	2½	145.0	154.20	116.7	do.	
N1120	E4	D-5	Flower Hill	do.	2½	94.7	117.37	56.4	do.	
N1121	E5	D-5	Strathmore Village	do.	2½	177.9	220.05	60.9	do.	
N1122	E6	D-5	North Hills	do.	4	139.0	178.99	65.3	do.	
N1123	E7	D-5	Herricks	do.	2½	95.9	144.53	65.9	Jan. 4, 1951	
N1124	E8	C-5	Garden City Park	do.	1¼	59.9	109.93	64.1	Dec. 18, 1950	
N1125	E9	C-5	do.	do.	1¼	48.8	93.96	60.9	do.	
N1126	E10	C-5	Stewart Ave. and Sackville Rd., Garden City	do.	1¼	49.4	86.74	56.5	do.	
N1127	E11	C-5	Munson	do.	1¼	38.1	75.15	50.6	Dec. 28, 1950	
N1128	E12	C-6	do.	do.	1¼	38.5	63.03	41.0	do.	
N1129	E13	C-6	Lakeview	do.	1¼	38.4	50.90	30.5	do.	
N1130	E14	C-6	Malverne	do.	1¼	33.4	37.51	20.7	do.	
N1131	E15	C-6	do.	do.	1¼	28.5	24.41	13.3	Dec. 20, 1950	
N1132	E16	B-6	Sunrise Highway and Lakewood Blvd., Lynbrook	do.	1¼	27.1	20.87	7.0	do.	
N1133	E17	B-6	East Rockaway	do.	1¼	23.4	10.03	2.8	do.	
N1134	F1	D-6	Roslyn	do.	1¼	33.3	39.04	21.9	Jan. 3, 1951	
N1134A	F1A	D-6	do.	do.	2	25.2	58.12	54.0	do.	
N1135	F2	D-6	do.	do.	2	87.5	144.27	68.7	Jan. 2, 1951	
N1136	F3	D-6	Albertson	do.	1¼	62.8	125.81	68.2	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1137	F4	D-6	Williston Park	N. C. D. P. W.	1¼	48.8	107.31	72.5	Jan. 2, 1951	
N1138	F5	D-6	Mineola	do.	1¼	48.5	104.37	70.7	Dec. 18, 1950	
N1139	F6	C-6	Garden City	do.	2½	59.1	102.96	65.3	do.	
N1140	F7	C-6	Kellum Pl. and 9th St., Garden City	do.	1¼	42.5	91.34	60.3	do.	
N1141	F8	C-6	Garden City	do.	1¼	32.5	76.56	51.5	Dec. 28, 1950	
N1142	F9	C-6	Hempstead	do.	1¼	33.6	61.92	44.0	do.	
N1143	F10	C-6	do.	do.	1¼	34.5	53.11	34.7	Jan. 2, 1951	
N1144	F11	C-6	South Hempstead	do.	1¼	31.9	46.85	30.4	do.	
N1145	F12	C-6	Rockville Centre	do.	1¼	27.6	40.16	25.3	do.	
N1146	F13	C-6	do.	do.	1¼	32.3	37.76	22.2	Dec. 20, 1950	
N1147	F14	B-6	Seaman Ave. near Knollwood Rd., Baldwin	do.	1¼	23.4	27.35	16.7	do.	
N1148	F15	B-6	Baldwin	do.	1¼	27.3	21.21	6.8	do.	
N1149	G1	E-6	Glen Cove	do.	2½	82.3	89.60	39.6	Jan. 5, 1951	
N1150	G2	E-6	do.	do.	1¼	20.6	53.08	38.2	do.	
N1151	G3	E-6	do.	do.	1¼	26.2	34.05	23.5	do.	
N1152	G4	E-6	do.	do.	4	130.4	154.05	49.2	do.	
N1153	G5	E-6	Glen Head	do.	2½	85.5	120.37	59.5	do.	
N1154	G6	D-6	Greenvale	do.	2½	141.2	178.50	63.1	do.	
N1155	G7	D-6	East Hills	do.	4	229.9	260.50	73.0	Jan. 4, 1951	
N1156	G8	D-6	Old Westbury	do.	4	108.9	158.08	76.1	Jan. 2, 1951	
N1157	G9	D-6	do.	do.	1¼	113.9	170.25	79.7	do.	
N1158	G10	D-6	do.	do.	1¼	51.7	111.22	75.7	do.	
N1159	G11	C-6	Carle Place	do.	1¼	33.4	86.14	70.9	do.	
N1162	G14	C-6	Uniondale	do.	1¼	38.5	70.50	49.4	do.	
N1163	G15	C-6	do.	do.	1¼	28.7	56.22	43.3	do.	
N1164	G16	C-6	Roosevelt	do.	1¼	34.2	48.98	32.4	do.	
N1165	G17	C-6	do.	do.	1¼	31.5	40.59	25.1	do.	
N1166	G18	C-6	Freeport	do.	1¼	27.4	29.15	16.8	Dec. 20, 1950	
N1167	G19	B-6	N. Ocean and Brooklyn Aves., Freeport	do.	1¼	26.0	22.27	10.4	do.	
N1168	G20	B-6	Freeport	do.	1¼	27.9	14.01	4.9	do.	
N1169	G21	B-7	S. Ocean Ave. and Hamilton St., Freeport	do.	1¼	23.5	4.60	1.6	Jan. 2, 1951	
N1170	H1	E-6	Lattington	do.	1¼	49.5	10.35	5.5	Jan. 5, 1951	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1171	H2	E-6	Lattington	N. C. D. P. W.	2½	38.1	83.28	61.9	Jan. 5, 1951	
N1172	H3	E-6	Locust Valley	do.	2½	101.5	143.99	58.5	do.	
N1173	H4	E-6	Glen Cove	do.	2½	96.9	144.60	64.6	do.	
N1174	H5	E-6	Chicken Valley Rd., Old Brookville	do.	2½	60.1	112.92	70.7	do.	
N1175	H6	D-6	Near N. Hempstead Turnpike, Old Westbury	do.	4	158.3	176.99	78.7	do.	
N1176	H7	D-6	Post Ave. and Wheatley Rd., Old Westbury	do.	4	197.6	194.61	82.4	Jan. 2, 1951	
N1177	H8	D-6	Hitchcock and Powell Las., Old Westbury	do.	4	146.2	182.88	83.3	do.	
N1178	H9	D-7	Westbury	do.	1¼	48.1	119.94	79.2	do.	
N1179	H10	C-7	School St. near Old Country Rd., Westbury	do.	1¼	37.7	104.24	73.1	do.	
N1180	H11	C-7	Stewart Ave. near Merrick Ave., Salisbury	do.	1¼	42.8	76.50	66.2	do.	
N1181	H12	C-7	Fulton St. near Merrick Ave., East Meadow	do.	1¼	38.0	82.85	56.5	Dec. 28, 1950	
N1182	H13	C-7	Spring St. and Merrick Ave., East Meadow	do.	1¼	37.8	70.91	49.5	do.	
N1183	H14	C-7	William St. and Jerusalem Ave., North Merrick	do.	1¼	32.6	50.17	36.0	do.	
N1184	H15	C-7	Meader and Camp Aves., North Merrick	do.	1¼	27.6	33.17	21.7	do.	
N1185	H16	B-7	W. Grand Ave. and Lindgren St., Merrick	do.	1¼	17.1	21.09	11.9	Dec. 20, 1950	
N1185A	H16A	B-7	Babylon Turnpike near Sunrise Highway, Merrick	do.	1¼	19.8	15.59	9.0	do.	
N1186	H17	B-7	Merrick Rd. and Central Parkway, Merrick	do.	1¼	23.1	9.96	5.3	do.	
N1187	O1	E-7	Bayville	do.	1¼	25.1	5.15	2.9	Jan. 5, 1951	
N1188	O2	E-7	Mill Neck	do.	1¼	33.6	36.80	18.8	do.	
N1189	O3	E-7	do.	do.	1¼	33.1	66.71	59.0	do.	
N1190	O4	E-7	Matinecock	do.	4	99.1	127.86	58.2	do.	
N1191	O5	E-7	Upper Brookville	do.	2½	97.2	154.38	73.4	do.	
N1192	O6	D-7	Muttontown	do.	2½	77.6	142.82	84.9	do.	
N1193	O7	D-7	Brookville	do.	2½	97.2	231.05	86.1	do.	
N1194	O8	D-7	Jericho	do.	2½	104.0	174.24	85.9	Jan. 4, 1951	
N1195	O9	D-7	Hicksville	do.	2½	84.1	146.99	81.9	Dec. 28, 1950	
N1196	O10	D-7	do.	do.	1¼	61.9	124.87	77.6	Jan. 4, 1951	
N1197	O11	C-7	do.	do.	1¼	61.0	116.62	73.1	Dec. 28, 1950	
N1198	O12	C-7	Newbridge Rd., So. of Hicksville	do.	1¼	52.5	101.64	65.5	Jan. 4, 1951	
N1199	O13	C-7	East Meadow	do.	1¼	49.0	89.45	57.8	Dec. 28, 1950	
N1200	O14	C-7	North Bellmore	do.	1¼	37.1	69.61	48.8	do.	
N1201	O15	C-7	do.	do.	1¼	31.7	55.07	40.7	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1202	O16	C-7	North Bellmore	N. C. D. P. W.	1¼	28.4	44.62	32.6	Dec. 28, 1950	
N1202A	O16A	C-7	do.	do.	1½	15.2	36.04	28.1	do.	
N1203	O17	C-7	Bellmore	do.	1¼	23.3	27.29	24.5	Dec. 21, 1950	
N1204	O18	C-7	Harris Court and John St., Bellmore	do.	1¼	28.6	21.47	11.3	do.	
N1205	O19	B-7	Bellmore	do.	1¼	28.3	9.26	1.7	do.	
N1206	P1	E-7	Bayville	do.	1¼	30.3	8.62	1.8	Jan. 5, 1951	
N1207	P2	E-7	Oyster Bay	do.	1¼	23.7	22.53	21.9	do.	
N1208	P3	E-7	do.	do.	1¼	30.7	59.17	44.5	do.	
N1209	P4	B-7	East Norwich	do.	4	128.9	126.5	75.5	Jan. 6, 1951	
N1210	P5	E-7	do.	do.	2½	139.6	188.25	94.4	do.	
N1211	P6	D-7	Syosset	do.	2½	156.0	217.25	73.8	do.	
N1212	P7	D-7	Jericho Turnpike, Locust Grove	do.	4	184.4	227.66	84.9	do.	Recorder well screened in Magothy (?) formation.
N1213	P8	D-7	Hicksville	do.	2½	109.3	175.18	83.8	Jan. 2, 1951	
N1214	P9	D-7	do.	do.	1¼	79.6	148.68	77.8	do.	
N1215	P10	D-7	Bloomingdale Rd. and Broadway, Hicksville	do.	1¼	53.4	115.26	72.4	do.	
N1217	P12	C-8	Island Trees	do.	1¼	32.2	76.74	55.8	do.	
N1219	P14	C-8	North Wantagh	do.	1¼	28.3	57.06	40.5	do.	
N1220	P15	C-8	Seaford	do.	1¼	22.5	44.05	28.9	do.	
N1221	P16	C-8	do.	do.	1¼	28.5	32.18	19.9	Dec. 21, 1950	
N1222	P17	C-8	Cecelia Pl. and John St., Seaford	do.	1¼	28.5	21.18	8.8	do.	
N1223	P18	B-8	South Massapequa	do.	1¼	23.3	6.09	3.0	do.	
N1224	T1	E-7	Cove Neck	do.	1¼	38.4	25.41	2.9	Jan. 6, 1951	
N1225	T2	E-7	do.	do.	1¼	19.9	8.31	3.6	do.	
N1226	T3	E-8	do.	do.	1¼	62.3	33.74	24.1	do.	
N1227	T4	E-8	Oyster Bay Cove	do.	2½	134.1	171.46	49.8	do.	
N1228	T5	D-8	Syosset	do.	4	178.8	223.77	65.2	do.	
N1229	T6	D-8	do.	do.	4	201.3	251.30	75.4	do.	
N1230	T7	D-8	Plainview	do.	2½	144.3	174.36	81.1	Jan. 2, 1951	
N1231	T8	D-8	do.	do.	2½	83.2	142.72	78.8	do.	
N1232	T9	D-8	Plainview Rd. and Plain Hay Path, Plainview	do.	2½	54.5	111.81	74.7	do.	
N1233	T10	C-8	Plainview Rd. and Motor Pkway., Bethpage	do.	1¼	53.7	95.19	65.9	do.	
N1234	T11	C-8	Plainview Rd., Central Park	do.	1¼	65.3	101.13	60.3	Dec. 21, 1950	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1236	T13	C-8	North of Massapequa Centre	N. C. D. P. W.	1¼	44.5	70.46	44.6	Jan. 2, 1951	
N1237	T14	C-8	Massapequa Centre	do.	1¼	34.2	55.95	34.3	do.	
N1238	T15	C-8	Massapequa	do.	1¼	28.6	40.54	28.3	do.	
N1239	T16	C-8	Massapequa Park	do.	1¼	28.5	30.44	18.1	Dec. 21, 1950	
N1240	T17	C-8	Manhattan Ave., Massapequa Park	do.	1¼	28.2	23.00	10.2	do.	
N1241	T18	B-8	South of Massapequa Park	do.	1¼	23.7	7.40	4.3	do.	
N1242	U1	E-8	N. Hempstead Turnpike, Cold Spring Harbor	do.	1¼	31.1	41.08	26.0	Jan. 6, 1951	
N1243	U2	E-8	Velsor-Stillwell Rd., Cold Spring Harbor	do.	1¼	16.0	64.61	55.3	do.	
N1244	U3	D-8	Jericho Turnpike and Avery Rd., Syosset	do.	4	259.0	248.89	72.2	Dec. 19, 1950	
N1245	U4	D-8	Plainview Rd., Plainview	do.	2½	202.3	259.93	77.3	do.	
N1246	U5	D-8	Plainview-Melville Rd., Plainview	do.	4	124.7	185.10	77.6	do.	
N1247	U6	D-8	Near Motor Pkway., Bethpage	do.	1¼	109.5	157.13	71.1	do.	
N1248	U7	C-8	Melville Rd., Farmingdale	do.	1¼	39.7	81.16	58.0	Jan. 2, 1951	
N1249	U8	C-8	Secatoque Ave. and Wall St., Farmingdale	do.	1¼	34.0	67.84	51.1	Dec. 19, 1950	
N1250	U9	C-8	Old Carmans Rd., Farmingdale	do.	1¼	33.5	62.24	43.8	do.	
N1251	U10	C-8	County Line Rd., Farmingdale	do.	1¼	28.7	48.85	36.0	do.	
N1252	U11	C-8	County Line Rd. and Smith St., Amityville	do.	1¼	25.5	29.31	23.7	do.	
N1253	U12	C-8	Clocks Blvd. and Pine St., Amityville	do.	1¼	28.7	28.48	14.4	do.	
N1254	U13	C-8	County Line and Merrick Rds., Amityville	do.	1¼	28.6	13.88	3.6	do.	
N1255	CH196	C-6	Clinton Rd. near St. James St., Garden City	do.	1¼	34.6	79.36	58.6	Dec. 18, 1950	
N1256	CH201	D-6	Hillside Ave. and Bacon Rd., Westbury	do.	1¼	50.5	112.34	75.6	do.	
N1257	L44	B-5	Carman and Scranton Aves., East Rockaway	do.	1¼	27.9	21.94	6.7	Dec. 20, 1950	
N1259	M183	C-8	Hicksville-Massapequa Rd., Plainedge	U. S. G. S.	1¼	47.5	78.37	50.8	Dec. 21, 1950	
N1260	S45	C-8	Main St. near Pittsburgh Ave., Massapequa	N. C. D. P. W.	1¼	29.3	33.14	20.4	do.	
N1262	S169	C-7	Wantagh Ave. near So. State Pkwy., Wantagh	N. Y. C. D. W. S.	1½	17.1	40.96	34.1	Dec. 19, 1950	
N1263	....	C-8	Wantagh and Farmingdale Rds., Central Park	N. C. D. P. W.	1¼	24.4	65.79	49.3	Dec. 21, 1950	
N1264	S183	B-7	Newbridge Rd., near Sunrise Hwy., Bellmore	N. Y. C. D. W. S.	1½	25.2	13.74	8.1	do.	
N1265	CL1	B-7	Merrick Rd. and Albany Ave., Freeport	N. C. D. P. W.	1¼	14.1	5.88	3.4	Dec. 20, 1950	
N1269	CL5	B-7	Babylon Turnpike and Poplar St., Merrick	do.	1¼	14.2	12.98	7.6	do.	
N1271	CL7	B-7	Florence St. and Beach Dr., Merrick	do.	1¼	14.3	4.62	2.3	do.	
N1273	CL9	C-7	Walters Ave. and Cypress St., Wantagh	do.	1¼	13.5	15.11	6.8	Dec. 21, 1950	
N1275	CL11	B-7	Byron St. and Willow Ave., Wantagh	do.	1¼	13.2	9.31	3.6	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1278	CL13	B-8	Nassau St. and Bay Dr., Massapequa	N. C. D. P. W.	1¼	14.3	13.16	6.6	Dec. 21, 1950	
N1280	CL15	C-8	Park Blvd. and Harmony Dr., Massapequa	do.	1¼	28.8	19.77	9.2	do.	
N1282	CL18	B-7	Jones Beach Causeway, Wantagh	do.	1¼	19.9	7.45	1.1	do.	
N1285	CL21	B-8	Spruce and Melvin Sts., Wantagh	do.	1¼	19.0	6.66	3.3	do.	
N1288	CL24	B-7	Bay View Ave. and St. Regis St., Wantagh	do.	1¼	18.9	9.98	3.7	do.	
N1421	X9	B-5	Cedarhurst Ave. and L. I. R. R., Cedarhurst	do.	1¼	37.6	28.64	7.6	Dec. 28, 1950	
N1422	X10	B-5	Causeway and Keewaydin Rds., Lawrence	do.	1¼	28.8	16.32	5.7	do.	
N1423	X11	B-5	Burnside and Wahl Aves., Inwood	do.	1¼	23.9	7.48	4.8	do.	
N1424	X12	B-5	McNeil Ave. and L. I. R. R., Inwood	do.	1¼	22.6	14.81	4.1	do.	
N1425	X14	C-5	L. I. R. R. and Tunnel St., Floral Park	do.	1¼	43.7	82.34	53.1	Dec. 30, 1950	Well not plotted, near well N1683.
N1426	X16	C-5	Hempstead Turnpike and Barrymore Blvd., Franklin Square	do.	1¼	30.1	59.70	44.9	Dec. 28, 1950	
N1427	X17	C-5	Park Dr. N. and Primrose La., N. Valley Stream	do.	1¼	33.1	42.41	25.2	do.	
N1428	X18	C-5	Whittier and Whitehall Sts., Lynbrook	do.	1¼	26.5	30.00	19.7	do.	
N1429	X19	B-5	Scranton Ave. and Bixley Heath, Lynbrook	do.	1¼	24.3	16.12	10.8	do.	
N1430	X20	D-6	Herricks Rd. S. of St. George Lake, Herricks	do.	1¼	45.9	106.04	69.2	Dec. 30, 1950	
N1432	X23	C-6	Cathedral Ave. near Seventh St., Garden City	do.	1¼	43.5	83.69	55.2	do.	
N1433	X24	C-6	Village Hall, Garden City	do.	1¼	46.8	88.37	55.1	do.	
N1434	X25	C-6	S. Linden St. near L. I. R. R., Hempstead Gardens	do.	1¼	39.4	59.03	32.7	do.	
N1435	X26	C-6	Eagle and Jennings Aves., Lakeview	do.	1¼	33.9	46.78	26.9	do.	
N1436	X27	C-6	Woodfield and Pinebrook Aves., Malverne	do.	1¼	33.4	36.33	18.7	do.	
N1437	X28	C-6	N. Village Ave. and Allen Rd., Rockville Centre	do.	1¼	32.7	43.77	25.0	Jan. 2, 1951	
N1438	X29	C-6	Princeton St. and Forestdale Rd., Rockville Centre	do.	1¼	22.7	35.76	20.5	do.	
N1439	X30	B-6	Sunrise Highway and N. Forest Ave., Rockville Centre	do.	1¼	29.1	27.44	12.9	do.	
N1440	X31	B-6	Foxhurst and Long Beach Rds., Oceanside	do.	1¼	28.8	18.70	6.7	do.	
N1441	X32	B-6	Oceanside Rd. and Windsor Parkway, Oceanside	do.	1¼	24.6	10.95	1.7	do.	
N1442	X33	C-6	W. Centennial Ave. and Talmadge Dr., Baldwin	do.	1¼	24.6	29.52	23.3	do.	
N1443	X34	B-6	W. Seaman Ave. and Brookwood Dr., Baldwin	do.	1¼	23.7	18.35	12.6	do.	
N1444	X35	B-6	Merrick Rd. and Milburn Stream, Freeport	do.	1¼	18.8	6.82	5.9	do.	
N1445	X36	C-7	Jerusalem and Schiller Aves., N. Bellmore	do.	1¼	25.3	42.61	33.0	do.	
N1446	X37	C-7	Camp Ave. and Newbridge River, Bellmore	do.	1¼	19.2	19.90	15.8	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1447	X38	B-7	Merrick Rd. and Newbridge River, Bellmore	N. C. D. P. W.	1¼	19.3	6.06	2.6	Jan. 2, 1951	
N1448	X39	C-7	Jerusalem Ave. near Wantagh Ave., Wantagh	do.	1¼	18.5	34.75	30.0	do.	
N1449	X40	C-7	Wantagh Spur, Wantagh	do.	1¼	17.8	20.15	16.7	do.	
N1450	X41	C-7	Beech St. near Bunker Pl., Wantagh	do.	1¼	27.4	27.85	16.5	do.	
N1451	X43	C-6	Clinton Rd., Garden City	do.	1¼	24.4	80.91	61.7	do.	
N1452	X44	C-6	Clinton Rd. at Stewart Ave. School, Garden City	do.	1¼	24.4	82.27	62.6	do.	Well not plotted, near well N1451.
N1453	X46	C-5	Tennessee St. near Louis Ave., Floral Park	do.	1¼	22.7	61.64	45.1	Dec. 28, 1950	Well not plotted, near well N1456.
N1454	X47	C-5	Louis Ave. and Emma St., Floral Park	do.	1¼	30.9	70.42	43.0	do.	do.
N1455	X48	C-5	Marguerite Ave. and Emma St., Floral Park	do.	1¼	24.7	59.21	42.2	do.	do.
N1456	X49	C-5	Emma St. and Frederick Ave., Floral Park	do.	1¼	30.9	66.72	43.1	do.	
N1457	X50	C-5	Frederick Ave. and Bertha St., Floral Park	do.	1¼	19.4	55.51	43.2	do.	Well not plotted, near well N1456.
N1458	X51	C-5	Bertha St. and Louis Ave., Floral Park	do.	1¼	30.1	66.82	41.5	do.	do.
N1459	X52	C-6	L. I. R. R. and Prospect St., Malverne	do.	1¼	27.9	35.99	21.2	do.	
N1460	X13	C-5	Tunnel St. and L. I. R. R., Floral Park	do.	1¼	44.9	82.76	52.6	Dec. 30, 1950	Well not plotted, near well N1475.
N1461	....	D-7	New South Rd. and L. I. R. R., Hicksville	do.	6	74.5	131.49	75.3	Dec. 29, 1950	M. P. about 2 ft. above L. S.
N1462	....	C-7	Mallard Rd. and Neptune La., Levittown	do.	6	51.7	94.98	61.9	do.	Recorder well, M. P. about 2 ft. above L. S.
N1463	S181	C-8	Seaman Neck Rd. near Southern State Parkway, Jerusalem	do.	6	30.6	50.67	37.0	Dec. 31, 1950	do.
N1464	....	C-8	Seaford Woods, Seaford	do.	6	37.8	27.63	15.7	Dec. 21, 1950	
N1472	X54	C-5	Charles St. near Beechurst Ave., Floral Park	do.	1¼	49.1	85.36	52.7	Dec. 30, 1950	Well not plotted, near well N1106.
N1474	X56	C-5	Stewart Ave. Basin, Floral Park	do.	1¼	49.6	87.55	52.1	do.	Well not plotted, near well N1425.
N1475	X57	C-5	Stewart Ave., Floral Park	do.	1¼	54.0	85.66	53.4	do.	
N1476	X65	E-7	Mill River Rd. near Remsen's La., Brookville	do.	4	82.7	130.00	67.2	Jan. 6, 1951	
N1477	X66	E-7	Sandy Hill and Berry Hill Rds., Oyster Bay	do.	4	193.6	217.00	48.4	do.	
N1478	X67	D-5	Allen La. and Steamboat Rd., Great Neck	do.	1¼	54.4	59.00	22.9	Jan. 3, 1951	
N1479	X68	D-5	Preston and Middle Neck Rds., Great Neck	do.	2½	61.9	58.84	22.6	do.	
N1481	X70	D-7	Plainview and New South Rds., Hicksville	do.	4	76.7	148.78	80.1	Jan. 8, 1951	
N1482	X71	E-5	Mill Pond and Harbor Rds., Port Washington	do.	2½	150.8	10.87	−0.2	Jan. 3, 1951	
N1483	X72	E-5	do.	do.	2½	98.8	10.54	9.8	do.	Well not plotted, near well N1482.
N1613	5	C-5	N. Valley Stream State Park, Valley Stream	Formerly C. W. S. C.	6	497.0	24.98	22.0	Dec. 19, 1950	Well screened in Magothy (?) formation.
N1614	....	C-6	Herricks Rd. and Sally Pl., Mineola	N. Y. C. D. W. S.	2	34.5	99.39	66.3	Dec. 18, 1950	
N1615	264	C-7	Merrick Ave. near Wilson Rd., East Meadow	do.	1½	25.6	62.75	43.0	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
N1616	276	D-6	Post Ave. and Argyle Rd., Westbury	do.	1½	48.4	122.80	80.0	do.	
N1621	X1	C-5	Jericho Turnpike near 225th St., Bellerose	N. C. D. P. W.	1¼	60.1	85.81	37.1	Dec. 28, 1950	
N1623A	X3A	C-5	Ludlam Ave. and Belt Parkway, Elmont	do.	1¼	55.9	64.00	29.3	do.	
N1624	X4	C-5	238th St. and 118th Ave., Elmont	do.	1¼	44.9	47.95	23.0	do.	
N1625	X5	C-5	Hook Creek Blvd. and St. Johns Ave., Valley Stream	do.	1¼	36.8	37.57	17.3	Dec. 20, 1950	
N1626	X6	C-5	Broadway near Gold St., Valley Stream	do.	1¼	24.2	16.14	10.5	do.	
N1627	X7	B-5	Ocean Ave. near Hook Creek, Woodmere	do.	1¼	19.1	4.04	1.6	do.	
N1628	X8	B-5	Howard Ave. and Ibson St., Woodmere	do.	1¼	18.9	5.05	2.4	Dec. 28, 1950	
N1682	X45	C-5	Elm and Crocus Aves., Floral Park	do.	1¼	54.8	83.11	41.5	Dec. 20, 1950	
N1683	X15	C-5	6th St. and Stewart Ave., Stewart Manor	do.	1¼	43.8	83.13	55.3	do.	
N1684	X22	C-6	Stewart and Madison Aves., Garden City	do.	1¼	48.7	89.53	55.5	Dec. 18, 1950	
N1685	X42	B-6	Freeport Power Plant, Freeport	do.	1¼	21.6	21.95	10.0	Jan. 2, 1951	
N1828	....	C-8	Melville Rd. at Suffolk County Line, Farmingdale	do.	6	37.0	83.89	57.8	Dec. 19, 1950	M. P. 2.0 ft. above L. S.
N1829	....	C-7	Stewart Ave. near Post Ave., Westbury	do.	6	29.2	79.17	66.0	Dec. 18, 1950	M. P. 2.5 ft. above L. S.
N1830	....	C-5	S. Tyson Ave. near L. I. R. R., Floral Park	do.	6	68.1	97.32	49.5	Dec. 20, 1950	M. P. 2.3 ft. above L. S.
N3552	6	C-7	Newbridge Rd. near Hempstead Ave., Hicksville	H. W. D.	12	170.0	123.70	72.7	Dec. 31, 1950	Recorder well screened in the Magothy (?) formation M. P. about 3 ft. above L. S.
	CH198	C-6	Clinton Rd. at Roosevelt Field, Garden City	N. Y. C. D. W. S.	1½	32.4	92.45	66.1	Jan. 2, 1951	Well not plotted, near well N1255.
	02	C-7	S. Village Green, Levittown	U. S. G. S.	1¼	39.5	77.92	51.8	Dec. 21, 1950	Well not plotted, near well N1263.
Q82	....	C-4	93-02 151st St., Jamaica	Kollner's Inc.	6	50	38.81	9.1	Dec. 6, 1950	M. P. about 6 ft. below street. Well not plotted, near well Q970.
Q110	....	C-4	173-07 Liberty Ave., Jamaica	Jamaica Laundry Co.	8	48	50.07	10.6	do.	
Q145	....	C-4	Lefferts Blvd. and Austin St., Kew Gardens	Austin Theatre	10	125	104.85	3.2	Dec. 5, 1950	
Q150	....	D-4	Main St. near 41st Ave., Flushing	Prospect Theatre	12	63	24.60	7.8	do.	
Q538	....	C-4	New York Blvd. and Jamaica Ave., Jamaica	Gertz Dept. Store	8	30	30.19	16.5	Dec. 6, 1950	M. P. about 28 ft. below street. Well not plotted, near well Q1395.
Q539	....	C-4	165-11 Jamaica Ave., Jamaica	Valencia Theatre	36	45	47.45	13.2	Dec. 19, 1950	Well not plotted, near well Q1395.
Q549	....	D-3	31st Ave. and 51st St., Woodside	Hobart Theatre	10	60	46.67	22.1	July 12, 1950	
Q970	....	C-4	Sutphin Blvd. and 89th Ave., Jamaica	Queens County Court-house	10	68	53.07	9.9	Dec. 6, 1950	Well in building; M. P. about 5 ft. below street.
Q1037	....	C-4	90-29 Sutphin Blvd., Jamaica	Hillside Theatre	12	100	49.36	8.7	do.	Well not plotted, near well Q970.
Q1066	....	C-3	Ithaca and 82d Sts., Jackson Heights	Jackson Theatre	10	68	68.38	22.4	Dec. 5, 1950	
Q1089	....	B-4	North Conduit Ave. near L. I. R. R., Aqueduct	N. Y. C. D. W. S.	2	32	20.51	2.1	Dec. 18, 1950	Replaced N. Y. C. D. W. S. well A33.

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
Q1090	....	C-4	Hawtree Creek Rd. near 133d Ave., Aqueduct	N. Y. C. D. W. S.	1½	42	31.62	2.2	Dec. 20, 1950	Replaced N. Y. C. D. W. S. well A43.
Q1096	....	C-4	Fresh Meadow La. and 69th Ave., Flushing	Mayfair Theatre	10	38	38.64	24.0	Dec. 6, 1950	
Q1152	....	C-4	Sunrise Highway and 131st St., South Ozone Park	N. Y. C. D. W. S.	6	200	13.24	0.0	Dec. 20, 1950	Well screened in Jameco formation; M. P. about 3 ft. above street.
Q1218	....	C-3	Myrtle Ave. and Madison St., Ridgewood	Madison Theatre	10	90	58.85	−7.0	Dec. 5, 1950	Well in basement; M. P. about 8 ft. below street.
Q1223	....	C-4	Rockaway Blvd. and 142d Pl., South Ozone Park	N. Y. C. D. W. S.	2	32	26.60	5.7	Dec. 19, 1950	Replaced N. Y. C. D. W. S. well A55A.
Q1225	....	C-4	109th Ave. and 200th St., Hollis	do.	2	32	49.40	24.0	do.	
Q1236	....	C-3	Continental Ave. and Queens Blvd., Forest Hills	S. S. Kresge Co.	10	72	58.73	7.3	Dec. 6, 1950	Well in basement; M. P. about 7 ft. below street.
Q1248	....	C-5	100th Rd. and Belt Parkway, Queens Village	N. Y. C. D. W. S.	1½	49	76.53	33.9	Dec. 19, 1950	
Q1249	....	C-5	106th Ave. and 216th St., Queens Village	do.	1½	49	72.35	28.7	do.	
Q1250	....	C-4	Liberty and Camden Aves., Hollis	do.	1½	26	37.68	17.3	do.	
Q1251	....	C-4	107th Ave. and 172d St., Jamaica	do.	1½	38	42.70	8.8	do.	
Q1252	....	C-4	Liberty Ave. and 157th St., Jamaica	do.	1½	28	31.18	9.7	do.	
Q1253	....	C-4	101st Ave. and 121st St., Richmond Hill	do.	1½	54	49.16	0.6	Dec. 20, 1950	
Q1254	....	C-3	101st Ave. and 108th St., Richmond Hill	do.	1½	54	45.56	−3.6	Dec. 19, 1950	
Q1255	....	C-3	Atlantic Ave. and Woodhaven Blvd., Woodhaven	do.	1½	53	40.41	−4.2	do.	Replaced N. Y. C. D. W. S. well A25A.
Q1256	....	C-3	95th Ave. and 82d St., Woodhaven	do.	1½	38	23.90	−2.8	Dec. 18, 1950	
Q1267	....	C-3	90th St. near 101st Ave., Woodhaven	N. Y. W. S. C.	4	107	14.47	−3.0	Dec. 19, 1950	Well in pump house; M. P. about 15 ft. below street.
Q1281	....	C-3	Liberty Ave. and Woodhaven Blvd., Ozone Park	N. Y. C. D. W. S.	1½	39	28.78	−0.9	Dec. 18, 1950	
Q1282	....	C-4	Liberty Ave. and 113th St., Richmond Hill	do.	1¼	52	39.97	2.8	Dec. 19, 1950	Replaced N. Y. C. D. W. S. well A38A.
Q1283	....	C-4	Rockaway Blvd. and 121st St., South Ozone Park	do.	2	32	26.70	2.9	Dec. 20, 1950	
Q1284	....	C-4	Rockaway Blvd. and Lincoln St., South Ozone Park	do.	1½	43	33.84	7.0	do.	
Q1285	....	C-4	132d St. and 111th Ave., South Ozone Park	do.	1½	47	42.84	3.9	Dec. 19, 1950	
Q1286	....	C-4	144th Pl. near Jamaica Ave., Jamaica	do.	1¼	49	46.94	7.0	do.	
Q1287	....	C-4	Merrick Blvd. and 116th Ave., St. Albans	do.	2	27	25.47	11.3	do.	
Q1288	....	C-4	Murdock Ave. and 180th St., St. Albans	do.	1½	28	36.30	14.8	do.	
Q1289	....	C-5	Springfield Blvd. and 110th Ave., Queens Village	do.	2	31	53.94	28.8	do.	
Q1313	....	C-4	Union Turnpike and 188th St., Jamaica	Utopia Theatre	12	59	68.89	25.6	Dec. 6, 1950	
Q1326	....	D-3	Astoria Blvd. and 91st St., Jackson Heights	Fair Theatre	8	72	27.44	16.1	Dec. 5, 1950	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
Q1391	....	C-3	59th Dr. and 59th St., Maspeth	Welbilt Stove Co.	12	140	58.77	−0.8	Dec. 5, 1950	
Q1395	....	C-4	89th Ave. and 164th St., Jamaica	Macy's Dept. Store	20	116	45.52	13.5	Dec. 19, 1950	Well in basement; M. P. about 15 ft. below street.
Q1406	....	C-3	Grand Ave. and 69th Pl., Maspeth	Maspeth Theatre	10	126	98.85	6.5	Dec. 5, 1950	
Q1416	....	C-3	Hoffman Dr. and 57th Ave., Woodside	Elmwood Theatre	12	50	22.43	10.9	do.	
Q1508	....	C-4	Parsons Blvd. near Union Turnpike, Jamaica	Parsons Theatre	12	100	74.90	17.7	Dec. 6, 1950	
Q1603	....	C-5	Union Turnpike near 259th St., Glen Oaks	Gross-Morton Co.	8	95	114.27	53.0	do.	Well in pit; M. P. about 5 ft. below street.
Q1719	....	D-4	Springfield and Horace Harding Blvds., Bayside	Oakland Golf Club	12	98	94.70	26.5	July 7, 1950	
S58	....	C-11	Grand Blvd. and 44th St., Islip	N. Y. C. B. W. S.	12	435.2	40.82	22.9	Dec. 21, 1950	M. P. 3.9 ft. above L. S.
S203	....	D-9	Wolf Hill and Caledonia Rds., Dix Hills	C. A. Gould	10	234.2	203.55	71.1	Dec. 20, 1950	Well screened in Magothy (?) formation.
S570	....	F-19	Route 25 and Pacific Ave., Mattituck	Mattituck Fire Dept.	6	40.4	15.28	2.0	Dec. 28, 1950	M. P. 2.0 ft. above L. S.
S597	....	G-20	S. Harbor La., Southold	Southold Fire Dept.	6	49.9	12.77	0.8	do.	do.
S599	....	G-20	do.	do.	6	44.7	12.05	1.7	do.	do.
S929-T	....	H-21	Route 25 and N. Country Rd., East Marion	Village of Greenport Dept. of Public Works	6	70.2	21.70	1.4	do.	M. P. 20.4 ft. below L. S.
S1803	SU12	C-9	Belmont Ave. and Farmingdale Rd., Babylon	N. Y. C. D. W. S.	1½	15.8	22.19	16.3	Dec. 21, 1950	
S1805	....	C-9	Farmingdale Rd. and Albany Ave., Amityville	do.	2	28.8	57.19	39.4	do.	
S1806	SU47	C-9	Wellwood and Long Island Aves., Pinelawn	do.	1½	39.8	86.38	54.2	do.	
S1807	SU66	C-10	Higbie La. near Hunter Ave., Babylon	do.	1½	11.7	24.67	21.1	do.	
S1808	SU75	C-10	Sagtikos Manor La. near S. Country Rd., Brightwaters	do.	1½	15.4	15.85	11.0	do.	
S1809-2	SU81	C-10	Manor La. and Muncey Rd., Brightwaters	do.	2	26.5	42.42	26.5	do.	
S1810	SU86	D-10	Pineaire Rd., Pineaire	do.	1¼	47.3	90.10	47.8	do.	
S1811	....	D-12	Near Smithtown Blvd., Ronkonkoma	N. Y. C. B. W. S.	1¼	22.4	53.68	52.3	do.	M. P. 1.5 ft. above L. S.
S1812	....	E-12	Smithtown Blvd. and Nichols Rd., Nesconset	U. S. G. S.	1¼	37.0	69.03	44.4	do.	
S1813	....	D-12	Johnson Ave. near Terry Rd., Ronkonkoma	do.	1¼	39.3	58.75	36.5	do.	
S1814	....	D-11	Suffolk and Lowells Aves., Central Islip	do.	1¼	48.7	79.63	34.6	do.	
S1815	....	D-11	Suffolk and Eastern Aves., Brentwood	do.	1¼	39.2	72.14	42.7	do.	
S1816	....	D-10	Brentwood and Commack Rds., Deer Park	do.	1¼	36.5	85.21	54.2	do.	
S1817	....	D-9	Long Island Ave. and 18th St., Wyandanch	do.	1¼	23.6	58.93	50.3	do.	
S2146	....	G-26	Golf Course, Montauk	Montauk Beach Co.	8	87.8	48.99	2.7	Dec. 28, 1950	M. P. 15.0 ft. below L. S.
S2314	....	D-9	Burr La., Wyandanch	Unknown	8	410.0	92.78	57.8	Dec. 21, 1950	Well screened in Magothy (?) formation.

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S2454	....	C-10	Near Deer Park Ave. at L. I. R. R. Station, Babylon	L. I. R. R.	1¼	68.8	13.29	7.5	Dec. 21, 1950	
S2455-1	....	C-10	Sandra Ave., Bayshore	N. Y. C. B. W. S.	10	17.5	32.95	20.8	do.	
S2455-2	....	C-10	Malts Ave. near Route 27, Bayshore	U. S. G. S.	1¼	15.9	35.20	24.4	do.	
S2455-3	....	C-10	Sandra Ave., Bayshore	do.	1¼	20.6	32.05	20.7	do.	Well not plotted, near well S2455-1.
S2485	....	E-15	Brookhaven National Laboratory, Upton	L. I. R. R.	8	75.0	68.63	33.0	Dec. 29, 1950	
S2676	....	F-19	Bergen Ave. and Cox Neck Rd., Mattituck	William Lindsay	6	61.2	14.25	3.2	Dec. 28, 1950	M. P. 2.7 ft. above L. S.
S3112	SU53	C-9	Long Island Ave. and Little East Neck Rd., Wyandanch	N. Y. C. B. W. S.	2	32.5	77.98	51.5	Dec. 21, 1950	
S3496	....	D-13	Coates Ave. near L. I. R. R., Holbrook	U. S. G. S.	1¼	75.8	116.10	46.3	Dec. 28, 1950	
S3497	....	D-13	Long Island and Waverly Aves., Holtsville	do.	1¼	64.9	103.81	46.0	Dec. 29, 1950	
S3498	....	D-13	Long Island Ave., Medford	do.	1¼	60.5	95.03	43.4	Dec. 29, 1950	
S3512	....	E-12	Route 25, The Branch	Schweiger	8	60.9	107.41	65.6	Dec. 21, 1950	
S3513	....	E-13	Route 25, Selden	N. Y. S. D. H.	8	64.6	102.38	60.5	Dec. 20, 1950	Recorder well.
S3514	....	E-10	Jericho Turnpike, Commack	Herman Jurgens	30	98.0	158.28	64.5	Dec. 26, 1950	Recorder well M. P. 3.3 ft. above L. S.
S3515	57	C-10	E. 3d Ave. near Brook St., Bayshore	N. Y. C. B. W. S.	2	35.0	44.15	30.7	Dec. 21, 1950	
S3516	58	D-10	E. 3d Ave. near Walbridge Ave., Bayshore	do.	2	37.7	60.50	35.3	do.	
S3517	60	C-12	Lakeland Ave. and Tariff St., Sayville	do.	2	37.0	31.56	12.3	Dec. 29, 1950	
S3518	79	D-11	Islip Ave. near Locust St., Central Islip	do.	2	34.7	51.73	29.8	Dec. 21, 1950	
S3519	93	D-11	Carleton Ave. near Manhattan Blvd., Central Islip	do.	2	33.8	32.60	24.5	do.	
S3521	162	D-13	Medford Ave., Medford	do.	2	49.5	72.57	36.0	Dec. 29, 1950	
S3522	166	D-13	Waverly Ave., Patchogue	do.	2	43.1	43.35	19.3	do.	
S3524	215	D-15	Park Rd. near Yaphank Ave., Yaphank	do.	2	35.2	46.45	21.5	Dec. 30, 1950	
S3526	218	E-15	Long Island Ave. and S. Haven Rd., Yaphank	do.	2	....	89.93	26.1	Dec. 28, 1950	
S3527	222	D-14	Horseblock Rd., Plainfield	do.	2	88.2	87.71	31.2	Dec. 30, 1950	
S3529	238	D-14	Horseblock Rd., Brookhaven	do.	2	34.1	38.42	24.8	do.	
S3530	240	D-14	Near L. I. R. R., west of Yaphank Ave., Yaphank	do.	2	45.5	65.92	31.4	do.	
S3531	254	D-15	River Rd., north of Montauk Highway, South Haven	do.	2	35.5	25.29	9.5	do.	
S3532	265	E-15	Whiskey and Randall Rds., Ridge	do.	2	69.8	85.21	45.6	do.	
S3533	272	E-14	South of Middle Country Rd., Middle Island	do.	2	31.7	61.84	45.0	do.	
S3534	276	D-15	Long Island Ave. and S. Haven Rd., South Haven	do.	2	67.0	67.50	28.8	Dec. 16, 1949	Well not plotted, near well S6536.

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S3535	284	D-16	Chichester and Brookfield Aves., Center Moriches	N. Y. C. B. W. S.	2	54.4	51.95	17.8	Dec. 28, 1950	
S3536	....	D-16	Bernstein Blvd., Center Moriches	do.	2	68.1	74.48	23.2	Dec. 26, 1950	
S3537	331	E-17	Old Country Rd., Speonk	do.	2	42.9	43.34	14.2	do.	
S3538	339	E-18	Route 113 near intersection with Route 31, Flanders	do.	2	39.4	33.75	14.3	do.	
S3539	403	E-17	Firebreak west of Riverhead Rd., Speonk	do.	2	87.9	79.33	22.0	do.	
S3540	404	E-17	Riverhead Rd., Speonk	do.	2	35.8	31.94	18.7	do.	
S3541	410	D-17	Old Country Rd., Speonk	do.	2	26.5	26.37	10.9	do.	
S3542	413	E-17	North of Old Country Rd. near L. I. R. R. crossing, Speonk	do.	2	54.5	72.11	18.7	Nov. 28, 1950	
S3543	....	E-18	Suffolk Airport, Westhampton	do.	2	58.1	64.44	15.5	Dec. 26, 1950	
S3544	....	D-18	Near L. I. R. R., Westhampton	do.	2	39.4	25.52	10.2	do.	
S3545	130	D-12	Lincoln Ave., West Sayville	do.	2	46.2	56.79	33.6	Dec. 29, 1950	
S3727	129	D-12	Church St., West Sayville	do.	2	38.7	40.06	29.4	do.	
S3728	186	D-14	Near Route 27, Hagerman	do.	2	46.9	48.11	20.1	do.	
S3729	204	D-14	Near Farm-to-Market Rd., Medford	do.	2	39.2	58.59	28.0	do.	
S3730	207	D-14	do.	do.	2	57.7	80.45	33.4	do.	
S3731	244	D-14	Scherger Ave., Hagerman	do.	2	44.3	52.02	22.3	do.	
S3732	259	E-14	Mt. Sinai Rd., Miller Place	do.	2	76.4	110.27	51.6	Nov. 30, 1950	
S3735	1214	E-13	Old Town Rd., Coram	do.	2	55.1	115.08	64.1	do.	
S3736	....	D-12	Schmidt St., Holbrook	U. S. G. S.	1¼	59.1	93.25	42.3	Dec. 29, 1950	
S3737	....	E-13	Holbrook Rd., Centereach	do.	1¼	64.0	110.54	54.7	do.	
S3738	....	E-12	Oxhead Rd., New Village	do.	1¼	68.8	114.59	58.7	July 6, 1949	
S3739	....	D-12	Lincoln Ave., Sayville	do.	1¼	30.2	50.99	26.3	Dec. 29, 1950	
S3760	....	F-15	Route 25A and Wading River Rd., Wading River	L. I. R. R.	12	139.8	117.56	26.4	Jan. 27, 1949	
S3868	....	F-12	Sheep Pasture Rd., Setauket	U. S. G. S.	2	114.5	99.63	36.7	Dec. 21, 1950	
S3869	....	E-14	Mt. Sinai Rd., Coram	do.	2	44.6	84.37	54.2	do.	
S3870	....	E-14	Mill Pond Rd., Coram	do.	2	44.4	88.11	53.3	Dec. 29, 1950	
S3871	....	E-14	Fire Rd., Plainfield	do.	2	93.0	128.64	46.3	Dec. 30, 1950	
S3955	....	E-12	Pond Path and Horseblock Rd., Setauket Station	do.	1¼	75.9	122.43	52.1	Dec. 21, 1950	
S3956	....	F-14	Mt. Sinai Rd., Miller Place	do.	1¼	124.1	145.47	30.7	Dec. 29, 1950	
S3966	....	F-19	Route 25, Mattituck	C. Koloski	5	48.5	9.97	2.6	Dec. 28, 1950	
S3978	....	H-21	Moore's La., Greenport	Village of Greenport	4	48.1	9.05	0.3	do.	M. P. 6.5 ft. below L. S.

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S4134	....	F-17	Roanoke Ave., Riverhead	Town of Riverhead	4	206.5	23.90	11.6	Dec. 28, 1950	Well screened in Magothy (?) formation.
S4268	....	E-10	Town Line Rd., Northport	U. S. G. S.	4	74.3	111.11	47.1	Dec. 21, 1950	
S4269	....	F-17	Reeves Ave., Riverhead	do.	4	65.1	68.95	12.7	Dec. 28, 1950	
S4270	....	D-10	Wicks Ave. and Crooked Hill Rd., Pineaire	do.	4	83.2	120.86	50.5	Dec. 21, 1950	
S4271	....	F-17	Long Island Research Farm, Riverhead	do.	4	105.2	101.44	9.3	Dec. 31, 1950	
S4367	....	D-10	Florida Ave., Commack	M. Goetzinger	30	123.9	176.06	54.9	May 5, 1950	
S4377	....	E-12	Moriches Rd., St. James	J. Zimmerman	36	47.8	104.68	59.8	Dec. 21, 1950	
S4523	....	F-18	Route S-58 and Northville Turnpike, Riverhead	U. S. G. S.	1½	13.1	16.31	8.5	Dec. 28, 1950	
S4524	....	F-18	Tuthill Rd., Laurel	do.	1¼	19.7	23.56	5.6	do.	
S4525	....	F-17	Twomey Ave. and Deep Hole Rd., Riverhead	Unknown	4	60.0	75.82	19.5	Dec. 22, 1948	
S4526	....	F-18	Sound Ave., Riverhead	J. T. Downe	36	64.7	67.93	7.5	Dec. 28, 1950	
S4529	....	F-16	Sound and Twomey Aves., Riverhead	J. Gresseck	4	107.4	104.68	10.9	do.	
S4530	....	F-17	Middle Country Rd. and Roanoke Ave., Riverhead	U. S. G. S.	1¼	11.6	21.57	13.9	do.	
S4676	....	F-18	Near Church La., Laurel	T. T. Luce	8	97.1	81.08	7.4	do.	
S4827	....	E-9	Broadway, Greenlawn	U. S. G. S.	4	198.6	215.84	55.0	Dec. 21, 1950	
S4828	....	E-9	Park Ave. and Broadway, Greenlawn	do.	4	137.9	185.75	66.1	do.	Well screened in Magothy (?) formation.
S4829	....	F-15	Randall Rd., Shoreham	do.	4	97.1	114.98	37.1	Dec. 28, 1950	
S5517	....	E-15	Brookhaven National Laboratory, Upton	do.	4	85.0	115.04	40.0	Dec. 22, 1950	Recorder well.
S5615	....	F-22	Bridgehampton	A. Tyska	12	160.0	119.22	15.8	Dec. 26, 1950	
S6400	....	E-15	Brookhaven National Laboratory, Upton	Brookhaven National Laboratory	1¼	61.0	90.98	41.2	Dec. 29, 1950	
S6401	....	E-15	do.	do.	2½	116.2	91.93	45.6	Aug. 26, 1949	Well not plotted, near well S6400.
S6403	....	E-15	do.	do.	2½	109.5	97.38	41.9	Dec. 29, 1950	do.
S6405	....	E-15	do.	do.	2½	51.0	48.72	41.2	May 25, 1949	Well not plotted, near well S6406.
S6406	....	E-15	do.	do.	2½	50.5	47.85	37.8	Dec. 29, 1950	
S6407	....	E-15	do.	do.	2½	34.5	47.69	41.8	do.	
S6408	....	E-15	do.	do.	4	108.5	74.46	46.2	Dec. 28, 1950	
S6410	....	F-15	Ridge Rd., Ridge	do.	4	88.0	110.17	43.2	Dec. 30, 1950	
S6411	....	F-15	Route 25A and Ridge Rd., Shoreham	do.	4	151.0	140.13	28.8	Dec. 28, 1950	
S6412	....	E-15	Near Wood Lot Rd., Middle Island	do.	4	110.5	119.27	45.7	Dec. 30, 1950	
S6413	....	E-14	Route 25, Middle Island	do.	4	110.0	95.08	46.3	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordi-nates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S6414	....	E-15	Middle Island Rd., Middle Island	Brookhaven National Laboratory	4	110.5	111.32	42.6	Dec. 30, 1950	Well not plotted, near well S6415.
S6415	....	E-15	do.	do.	4	89.5	79.88	42.6	do.	
S6416	....	E-15	Brookhaven National Laboratory, Upton	do.	4	88.5	79.25	34.9	Dec. 28, 1950	
S6417	....	E-15	Upton Rd., South Haven	do.	4	89.5	77.56	31.0	do.	
S6418	....	E-15	Middle Island Rd., Middle Island	do.	4	143.5	141.77	33.9	Dec. 30, 1950	
S6419	....	D-15	Upton Rd. and Dawn Dr., Upton	do.	4	88.5	64.82	15.6	do.	
S6420	....	E-15	Middle Country Rd., South Manor	do.	4	89.5	68.32	27.3	Dec. 28, 1950	
S6421	....	E-16	Dayton Ave., South Manor	do.	4	91.5	94.47	37.7	Dec. 30, 1950	
S6422	....	E-15	Wading River Rd., Wading River	do.	4	152.5	75.95	39.9	Dec. 28, 1950	
S6423	....	F-15	Schultz Rd., Wading River	do.	4	93.0	93.37	34.5	do.	
S6424	....	E-15	Brookhaven National Laboratory, Upton	do.	4	86.5	83.56	41.0	Dec. 29, 1950	Well not plotted, near well S5517.
S6425	....	E-15	do.	do.	4	86.5	70.06	36.6	do.	Well not plotted, near well S6426.
S6426	....	E-15	do.	do.	4	86.5	68.15	34.7	do.	
S6428	....	E-15	do.	do.	4	91.5	82.25	41.7	Dec. 26, 1950	Well not plotted, near well S6400.
S6433	....	E-15	do.	do.	4	83.5	74.10	43.1	do.	Well not plotted, near well S6445.
S6435	....	D-15	Long Island Ave., South Haven	do.	2	83.0	77.42	19.3	Dec. 30, 1950	
S6436	....	D-15	Weeks Ave., South Manor	do.	1¼	30.0	42.56	24.1	do.	
S6437	....	D-16	Dayton Ave. and Yaphank Rd., South Manor	do.	1¼	47.0	59.87	21.8	Dec. 28, 1950	
S6438	....	D-16	Brookfield Ave., Moriches	do.	1¼	42.0	29.08	7.2	do.	
S6439	....	D-16	Wading River Rd., Moriches	do.	1¼	42.0	56.01	22.1	do.	
S6440	....	E-16	Wading River Rd., South Manor	do.	1¼	22.0	40.93	33.1	do.	Well not plotted, near well S6441.
S6441	....	E-16	do.	do.	1¼	22.0	47.33	35.0	do.	
S6442	....	E-16	do.	do.	1¼	22.0	44.44	36.8	do.	
S6443	....	E-16	Schultz Rd., South Manor	do.	1¼	32.0	56.56	40.0	do.	
S6444	....	E-15	South St. and Weeks Ave., South Manor	do.	1¼	32.0	55.42	32.0	do.	
S6445	....	E-15	Brookhaven National Laboratory, Upton	do.	2½	80.0	80.54	42.4	Dec. 26, 1950	
S6448	....	E-15	Route 25, Ridge	do.	2	45.0	89.30	47.3	Dec. 28, 1950	Well not plotted, near well S6408.
S6449	....	E-15	Old Saddle Rd. and Route 25, Ridge	do.	2	50.0	77.52	41.4	do.	
S6450	....	E-15	Route 25, Ridge	do.	1¼	38.0	57.76	42.7	do.	
S6451	....	E-15	Long Island Ave., South Manor	do.	2	80.0	84.65	27.6	do.	
S6452	....	D-15	Barnes Rd., Moriches	do.	1¼	42.0	26.64	14.8	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Continued)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S6453	....	D-16	Route 27 and Barnes Rd., Moriches	Brookhaven National Laboratory	1¼	22.0	11.29	4.4	Dec. 28, 1950	
S6454	....	E-14	Route 25, Ridge	do.	2	40.0	70.74	46.0	Dec. 30, 1950	Well not plotted, near well S6413.
S6457	....	D-14	Route 25 and Upton Rd., Ridge	do.	4	211.0	55.07	13.4	do.	
S6461	....	F-15	Sound Ave., Wading River	do.	32	16.5	23.34	8.4	Sept. 7, 1950	M. P. 2.7 ft. above L. S.
S6462	....	F-16	Route 25, Wading River	do.	28	35.0	75.67	40.3	Dec. 1, 1949	Well not plotted, near well S6422.
S6463	....	E-15	Weeks Ave., South Manor	A. Schlephaak	1¼	35.0	59.94	31.4	June 28, 1950	Well not plotted, near well S6444.
S6464	....	E-14	South St., South Manor	Unknown	28	16.0	48.28	33.0	do.	do.
S6465	....	E-16	South St., Moriches	do.	1¼	36.3	48.43	30.9	Dec. 28, 1950	
S6466	....	E-15	Brookhaven National Laboratory, Upton	Brookhaven National Laboratory	1¼	10.0	45.63	38.6	June 8, 1949	Well not plotted, near well S2485.
S6467	....	E-15	Dew Flag Rd., Ridge	Unknown	1¼	27.5	72.55	45.7	Dec. 28, 1950	
S6469	....	E-15	Brookhaven National Laboratory, Upton	Brookhaven National Laboratory	4	88.4	123.55	40.4	Dec. 29, 1950	
S6471	....	E-15	do.	do.	1¼	14.9	46.04	36.7	July 27, 1950	Well not plotted, near well S6444.
S6474	....	E-15	do.	do.	1¼	11.9	47.78	36.6	Dec. 29, 1950	
S6522	....	G-20	Horton's La., Southold	J. McCabe	26	45.4	39.37	2.7	Dec. 28, 1950	
S6524	....	G-20	Bayview Rd., Southold	Southold Fire Dept.	6	40.2	6.24	1.6	do.	
S6528	....	G-20	Boisseau Ave., Southold	do.	6	61.1	15.72	2.0	do.	M. P. 2.4 ft. above L. S.
S6529	....	G-20	Route 25, Southold	R. Heilig	1¼	33.4	25.98	2.1	do.	
S6532	....	G-20	Horton's La., Southold	Conway Bros.	24	52.0	45.85	2.4	do.	M. P. 2.3 ft. above L. S.
S6537	....	G-20	Cox La. and Route 25, Cutchogue	Cutchogue Fire Dept.	6	44.4	13.14	2.3	do.	
S6540	....	G-20	Alvah's La., Cutchogue	do.	6	48.4	22.40	3.4	do.	
S6542	....	G-20	Depot La., Cutchogue	do.	6	35.5	25.59	3.3	do.	
S6543	....	G-20	New Suffolk La., Cutchogue	do.	6	45.6	14.40	1.6	do.	
S6544	....	F-20	do.	do.	6	41.6	11.79	1.7	do.	
S6555	....	G-19	Oregon Rd. and Depot La., Cutchogue	A. Krupski	36	62.8	58.83	2.1	Mar. 28, 1950	
S6556	....	G-20	Cox Rd., Cutchogue	L. Glover	36	26.7	21.32	3.7	Jan. 31, 1950	Well not plotted, near well S6537.
S6558	....	F-19	Route 25, Mattituck	Mattituck Fire Dept.	6	38.3	15.17	3.3	Dec. 28, 1950	
S6560	....	F-19	Cox Neck Rd., Mattituck	do.	6	30.4	22.72	4.3	do.	
S6566	....	F-19	Peconic Bay Blvd., Mattituck	do.	6	33.0	12.35	1.5	do.	
S6780	....	G-19	Breakwater Rd., Mattituck	J. Moisa	10	99.7	49.17	3.2	do.	
S7170	....	H-23	Route 25, Orient	J. Koroleski	2	32.4	14.53	1.1	do.	

See footnotes at end of table.

Table of data on shallow observation wells in Long Island, N. Y. (Concluded)

Well number		Map co-ordinates	Location	Owner	Diameter (inches)	Depth (feet)	Altitude of M. P. (feet) a	Water level		Remarks
State	Owner's							Altitude (feet) b	Date	
S7174	....	H-22	South of Route 25, Orient	W. Hallock	96	19.8	7.54	1.4	Dec. 28, 1950	Large dug well.
S7267	....	G-20	North Rd., Cutchogue	Cutchogue Fire Dept.	6	43.3	19.16	3.7	do.	
S7281	....	H-23	Route 25 near Orient Pt., Orient	E. King	30	22.3	14.62	.8	do.	
S7282	....	H-23	Route 25, Orient	H. Duvall	1¼	20.5	11.15	1.1	do.	Well point driven in a dug well. Well not plotted, near well S7170.
S7283	....	H-22	do.	W. Karcher	24	30.5	23.12	1.7	do.	
S7284	....	H-22	Orchard St., Orient	E. Petty	30	26.1	18.14	1.5	do.	
S8574	....	F-19	Herricks La., Jamesport	W. McNulty	30	27.8	32.53	6.0	July 25, 1950	
S8831	....	F-21	North Sea Rd., Southampton	U. S. G. S.	1¼	23.0	19.11	5.6	Dec. 26, 1950	
S8832	....	E-21	do.	do.	2	43.0	47.72	6.7	do.	
S8834	....	F-22	Route 114, Sag Harbor	do.	1¼	23.0	26.73	9.6	do.	
S8835	....	E-19	Route 24, Hampton Bays	do.	2	33.4	33.68	7.0	do.	
S8836	....	E-21	Nugent St., Southampton	Southampton Fire Dept.	8	37.3	18.87	5.6	do.	
S8837	....	F-23	Route 27, East Hampton	East Hampton Fire Dept.	6	33.9	15.82	6.9	do.	
S8838	....	F-22	Route 27, Bridgehampton	Bridgehampton Fire Dept.	6	46.4	28.40	9.4	do.	
S8839	....	F-24	Windmill La., Amagansett	A. Toler	1¼	37.1	40.11	6.4	do.	Well point driven in a dug well.
S8841	....	F-23	Hands Path, Hardscrabble	C. Swenck	36	39.7	48.80	10.3	Oct. 5, 1950	
S8842	....	F-22	Sag Harbor Rd., Bridgehampton	W. Shebach	36	25.2	38.44	14.7	do.	
S8843	....	F-23	Three Mile Harbor, East Hampton	H. Lester	30	26.6	32.98	8.0	Dec. 26, 1950	
S8844	....	F-22	Route 114 and Jermiah Ave., Sag Harbor	Sag Harbor Fire Dept.	6	84.5	20.48	4.4	do.	
S8851	....	G-20	Near Cutchogue R. R. Station, Cutchogue	U. S. G. S.	2	54.5	42.38	3.2	Dec. 28, 1950	
S8853	....	H-21	Route 25, Greenport	A. Rutkowski	1¼	54.0	16.04	2.0	do.	
S8854	....	H-21	Kaplan and North Sts., Greenport	U. S. G. S.	1¼	29.4	9.58	1.0	do.	
S8861	....	D-8	Mt. Misery and Old Country Rds., Melville	F. Bensin	8	246.0	293.35	77.2	Dec. 19, 1950	Well screened in Magothy (?) formation.
S8912	....	E-11	Route 25 and Route 25A, The Branch	F. Lackman	36	28.1	59.30	33.2	Dec. 21, 1950	

[a] Convenient reference mark, such as top of coupling, casing, well pit, or other point.
[b] Altitude above or below (—) mean sea level (Sandy Hook Datum).
[c] Former supply well of larger diameter, capped, with smaller riser pipe in cap.